# GASOLINE: SUPPLY, PRICE, AND SPECIFICATIONS

#### **HEARINGS**

BEFORE THE

# COMMITTEE ON ENERGY AND COMMERCE HOUSE OF REPRESENTATIVES

ONE HUNDRED NINTH CONGRESS SECOND SESSION

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## GASOLINE: SUPPLY, PRICE, AND SPECIFICATIONS

#### WEDNESDAY, MAY 10, 2006

HOUSE OF REPRESENTATIVES, COMMITTEE ON ENERGY AND COMMERCE,

Washington, DC.

The committee met, pursuant to notice, at 10:00 a.m., in Room 2123 of the Rayburn House Office Building, Hon. Joe Barton (chairman) presiding.

Members present: Representatives Barton, Hall, Gillmor, Norwood, Cubin, Shimkus, Wilson, Shadegg, Buyer, Radanovich, Bass, Pitts, Bono, Walden, Terry, Rogers, Otter, Myrick, Sullivan, Burgess, Blackburn, Dingell, Waxman, Markey, Boucher, Brown, Eshoo, Stupak, Wynn, Green, Capps, Schakowsky, Solis, Gonzalez, Inslee, Baldwin, and Ross.

Staff present: David McCarthy, Chief Counsel for Energy and Environment; Margaret Caravelli, Counsel; Maryam Sabbaghian, Counsel; Sue Sheridan, Minority Senior Counsel; Bruce Harris, Minority Professional Staff Member; Lorie Schmidt, Minority Counsel; and Peter Kielty, Legislative Clerk.

CHAIRMAN BARTON. The committee will come to order. The Chair recognizes himself for an opening statement. Today the committee begins two days of examining gasoline supply, price, and specifications. Just last week we completed another painful seasonal transition from winter gasoline to summer gasoline production at our Nation's refineries. Early May is always a tough time for drivers, but this year has been especially difficult. As storage tanks have gone down with the old gasoline, prices have shot up, in some cases to all-time records. If that wasn't enough, some people couldn't buy gasoline at any price in their neighborhood. I know that because I was one of them up here in my condo in Arlington, Virginia.

Gasoline markets are complicated. The price is driven by many factors, but mostly it is the old standby of supply and demand. We consume about 12 million barrels of fuel in the United States every day. We have invited the experts today; the regulators, the producers, the suppliers, the transporters, the retailers, and the consumers of gasoline to explain what goes on from the time a barrel of oil is brought into a refinery to the point where you and I put it in our cars and trucks at our Nation's gas pumps. The world crude oil pricing hearing last week that

this committee held reminds everyone that the U.S. government cannot dictate worldwide crude oil prices. Developments in other parts of the world have brought the price of crude to \$75 a barrel and when that happens, there is an inevitable increase in the price of gasoline that we pay at the pump.

When the price of one changes, i.e., crude oil in the world market, the price of the other, i.e., retail price of gasoline follows. More than half of the price of a gallon of gasoline is determined by the price of crude oil. Domestically, our gasoline production supply and delivery system is still recovering from the devastating effects of Hurricanes Katrina and Rita and is undergoing a major transition in gasoline formulation as we have taken MTBE off the market and are trying to replace it with either ethanol or reformulated gasoline. Coupled with this is the annual transition that I have already talked about.

Most fuels move across the country inside pipelines, but ethanol and the fuels blended with ethanol can't do that. They move in rail cars and tanker trucks. Increasing our domestic ability to produce and deliver the finished product of ethanol enhanced gasoline, America is trying to find a new way to do something that it hasn't done, as a Nation, across the continental United States. In the energy bill that we passed last year, we did many things on, what I call, the non-mobile energy side to help our Nation's energy future in areas like clean coal and nuclear power and LNG siting facilities for new natural gas supplies.

We need to do things on the mobile supply side that will help the drivers of our cars and trucks. These include, in my opinion, opening up some of our domestic areas when we still have potential for large amounts of oil and gas to be discovered, including ANWR and OCS, and I believe we also need to streamline the requirements to permit new refineries or to expand existing refineries in our country. So today we are going to begin the process of determining exactly how to do that. We are going to, while we try to integrate ethanol into our Nation's fuel supply, as we move from MTBE to ethanol. So I am going to look forward to hearing the testimony of our witnesses and today will be one of many hearings we have in the next month to get the facts on the table to the American people.

With that, I would be happy to recognize the Ranking Member of the Energy and Air Quality Subcommittee, Mr. Boucher of Virginia, for an opening statement.

[The prepared statement of Hon. Joe Barton follows:]

## PREPARED STATEMENT OF THE HON. JOE BARTON, CHAIRMAN, COMMITTEE ON ENERGY AND COMMERCE

Good morning. Today the Committee begins two days of examining gasoline supply, price and specifications. Just last week, we completed another painful transition from winter gasoline to summer gasoline. Early May is always a tough time for drivers, but it was downright painful this year. As storage tanks were drained, prices shot up. If that weren't enough, some people couldn't buy gasoline at any price in their neighborhood stations. I know because was one of them.

Gasoline markets are complicated. The price is driven by many factors, but mostly the old standby of supply and demand. We consume about 10 million barrels of fuel in the United States every day. In the course of this hearing, America will use about 20 million barrels. We have invited the experts: the regulator, the producer, the supplier, the transporter, the retailer and the consumer of gasoline to this hearing to explain exactly what goes on from the time a barrel of oil is brought into a refinery to the point where you and I pump fuel into our cars and trucks.

The World Crude Oil Pricing hearing last week reminded everyone that the U.S. government cannot dictate crude oil prices. With major developments in other parts of the world bringing the price of crude to \$75 a barrel, there is an inevitable and corresponding increase in the price of gasoline at the pump. When the price of one changes, the price of the other follows. More than half of the price of a gallon of gasoline is determined by the price of crude oil. Domestically, our gasoline production, supply, and delivery system is still recovering from the devastating effects of hurricane Katrina and undergoing a major transition in gasoline formulation by moving from MTBE to ethanol. Coupled with this is the annual transition from winter to summer grade gasoline.

Most fuels move across the country inside pipelines. But ethanol and fuels blended with ethanol move in railcars and tanker trucks. Increasing our domestic ability to produce and deliver finished product, whether it be gasoline or diesel fuel, is America taking control of its energy future. The bipartisan Energy Policy Act passed last year was a critical step in the right direction. However, many of us in the Republican Party continue to pursue policies that would expand our energy supply and capacity. Unfortunately some of the most important, including ANWR, OCS, and the streamlined permitting of refineries, continue to be blocked by those who believe families can fill their tanks with excuses instead of affordable gasoline.

They say there a no easy fix, but while we integrate ethanol into the nation's fuel supply, any transitional measure that may alleviate the pressure on price should be welcomed and seriously considered. Congressman Shadegg's bill, the Ethanol Tax Relief Act of 2006, which I cosponsored, would suspend until January 1, 2007 the 2.5 percent tariff and 54 cent per gallon duty on imported ethanol.

Another logistical hurdle to the delivery of the nation's fuel supply is the existence of a number of specialty fuels, commonly known as "boutique fuels." The passage of the Clean Air Act Amendments of 1990 established the Reformulated Gasoline Program (RFG) for areas with severe air pollution. Areas not required to participate in the RFG program saw the environmental value of using a cleaner fuel, but were concerned with the higher cost associated with RFG. Another provision included in the Clean Air Act Amendments of 1990 permitted states to seek EPA approval for boutique fuels that would bring benefits similar to RFG, but for less cost. Twelve states have taken advantage of this provision.

In the Energy Policy Act of 2005 we capped the number of boutique fuels to those approved as of September 1, 2004 and required the EPA, in consultation with DOE, to determine and publish a list of those boutique fuels. I look forward to hearing from EPA today as to the status of that list. However, we need to learn from this hearing what this balkanization is doing to the delivery and price of fuel.

Understanding how fuel supply and specifications affect price may shed light on steps Congress can take against price spikes while also advancing the cause of clean air. I expect to hear more today on the recent transitions our fuel supply chain has undertaken and a complete description of boutique fuels.

We invited today's witnesses to help us understand gasoline price, supply and specifications. Again, I would like to thank the witnesses for coming.

MR. BOUCHER. Well, thank you very much, Mr. Chairman. I commend your decision to conduct a series of hearings, today and tomorrow, on gasoline supply and pricing, a major concern of all Americans. A thorough understanding of a variety of factors affecting the gasoline market is the key to our ability to act thoughtfully, to address the national concern over gasoline prices. These hearings can lead to that understanding. Frequently mentioned among the factors leading to high crude oil prices are the dramatic growth of the economies of both China and India and political instability in certain oil producing regions. The price of crude oil carries an Iran risk component and a lesser Nigerian risk component; and I am interested this morning in learning to what extent prices are affected by these and perhaps other political risks.

But beyond crude oil pricing, another major contributor to high prices at the pump is our restrained refining capacity. Globally, the refinery utilization rate exceeds 90 percent of capacity and we have constrained refining capacity domestically. We are currently importing refined gasoline from other countries. We don't have enough capacity in the U.S. to refine the gasoline that we consume in this country. Under current global and domestic refining restraints, any disruption in refinery operations drives up gasoline prices dramatically. We are operating on a truly thin margin.

I think, Mr. Chairman, you would agree that there is a consensus in this committee that more domestic refining capacity is needed and that we should diversify refinery locations throughout the country so that another major hurricane along the Gulf Coast does not dramatically reduce the flow of refined product to market and dramatically escalate atthe-pump prices. While we agree on the need for more refineries, I think we do differ on the method needed to obtain them. The bill that was debated on the floor last week would have overridden State environmental permitting processes based upon the assumption that environmental permitting obstacles have prevented new refinery construction.

The record before this committee, however, is devoid of any evidence that supports the assumption, that the reason that we don't have more refinery construction is State permitting processes. In fact, the CEOs of major refining companies have testified to the Congress that

State permitting is not a barrier to new refinery construction or to the expansion of existing refineries. The bill which the House put aside last week was not the answer. A more thoughtful approach is needed. This week, Mr. Dingell and I are introducing legislation which will make a genuine difference in relieving our restrained refinery capacity.

We seek to build upon the well-established and highly successful strategic petroleum reserve by creating a strategic refinery reserve for use in terms of times of emergency. Just as the strategic petroleum reserve has been an excellent shock absorber in times of crude oil supply disruption, we propose a national refinery reserve for use when a hurricane or other extraordinary event disrupts the supply of gasoline to markets in the United States. During normal times, the strategic refineries would produce gasoline for governmental use; during times of emergency, they would supply gasoline to the commercial market.

At a time when the public is looking to the Congress for answers, Mr. Dingell and I are offering a measure based upon a proven model that will make, I suggest, a genuine difference. I would welcome comments from our witnesses today and tomorrow on this proposal. And Mr. Chairman, I invite your careful review of it as we move forward. We would welcome a bipartisan effort to employ the same means through which we solved the problem of crude oil disruptions to solve the problems which will arise from future disruptions in the flow of refined gasoline.

Mr. Chairman, I appreciate your scheduling these hearings, and I very much look forward to what our witnesses will say to enlighten us on the problems relating to gasoline supply and pricing both today and tomorrow. Thank you. I yield back.

CHAIRMAN BARTON. We thank the distinguished Member from Virginia for that statement. Mr. Norwood.

MR. NORWOOD. Thank you very much, Mr. Chairman, for having this hearing on gas supply and how critically important that is. Gas prices are critical to our constituents and they are paying amounts. But just as important, gas and energy prices are critical to our economy and job creation. We all know the stories and the statistics of record increases and record prices. True also is that we know about record profits and record severance packages, but that really isn't the reason we are here today. Today we are here to examine probably the single most important source of the problem and that is supply.

The debt-based U.S. economy has grown and demanded more fuel for the jobs we all say we want to see created and sustained. Increasingly, however, that demand was met by OPEC and other international oil producers. Sixty percent of our energy is now imported. Our energy future remains in the clutches of the OPEC cartel, at the

whims of an Iranian radical, at the mercy of political unrest and civil wars in Africa, and at the beck and call of dictators in South America. It is no wonder the American people are upset. Neither they nor I accept the answer that oh, nothing can be done.

I think we all have a right to be frustrated, frustrated that some folks oppose a reasonable and balanced energy bill and still find time to decry energy prices. These same folks oppose any new domestic exploration and development time and time again. They oppose the development of nuclear and other sources of energy. They oppose the ability of refineries to expand and eliminate a bottleneck in our fuel supply, and they oppose even renewable energy off the coast. It seems to me having a United States refinery run by FEMA is not the answer. Energy prices skyrocketed because someone's favorite vacation or wind surfing site might have a renewable wind energy project offshore.

But apparently, we can tax, which is a usual solution. Speaking of taxes, the Congressional Research Service noted that opening ANWR to just limited development would result in somewhere between \$111 and \$178 billion in new taxes and royalties. So we can't drill, we can't diversify, we can't expand, and we can't compete, and now we can't afford the gas to go to the store or the baseball game or to the school. These positions are simply unsustainable. We, as a Congress, simply have to accept that every energy bill that comes out can't be written individually by each of us. And you may not like exactly the energy bills that have been coming out, but the majority do and they need to get passed.

Mr. Chairman, with that, I yield back my time.

CHAIRMAN BARTON. We thank the gentleman. The Ranking Member of the full committee, Mr. Dingell, is recognized for 5 minutes.

MR. DINGELL. Mr. Chairman, I thank you for your courtesy and I thank you for holding this important hearing. Less than one year after Hurricanes Katrina and Rita caused some of the highest gasoline prices the country has seen, we are still in the midst of a struggle to understand the cause of high prices and determine what, if anything, the Administration or the Congress can do to remedy the problem. The Administration has been laggard in implementing the important provisions in the Energy Policy Act of 2005. Prices have now risen to a nationwide level of \$2.95 per gallon, our highest level since the hurricanes struck, and Americans are feeling the pain.

The American Automobile Association estimates that current prices will lead an average American family to spend an additional \$1,260 more for gasoline than they would have at January's price levels. For many families, this is not an insignificant amount, especially following a winter of high heating costs. For some families, the costs of energy puts them

in dire financial straits. I do believe it would have been far better if the House had taken up Representative Stupak's price gouging bill last fall instead of waiting until last week to tackle this issue. It would also have been better if the Administration's 2007 fiscal year budget request had been funded fully with regard to energy conservation, efficiency, and the renewable provisions of the Energy Policy Act of 2005. At this late date, the ability of Congress to have an immediate impact upon gas prices is extremely limited.

I think it is important to have hearings so that we can understand the facts and fully decide whether and how to legislate, and for that reason I commend you, Mr. Chairman. In fact, before we have a vote on refinery legislation on the House floor again, I hope that this committee will hold hearings and respond to the requests of State and local governments to testify about their permitting processes because this is an extremely important part of the questions before us with regard to price and supply. We know that the cost of crude oil has a significant impact on the price of gasoline and we have explored this aspect to pricing in last week's hearings.

I look forward to the testimony from the witnesses today about whether the reforms adopted in the Energy Policy Act of 2005 have been implemented and whether they are working. I am particularly interested in hearing about the boutique fuel provisions of the Energy Policy Act of 2005, which I support, that limited the number of boutique fuels, required the Environmental Protection Agency, EPA, and the Department of Energy to publish a list of current fuels, and required a study as to whether further legislative action is necessary. The law required the EPA to meet with interested parties to study this matter and to report to the Congress by this August, but just last week, EPA announced that it was taking a belated "first step" to engage the States in a dialogue over the issue. I think they have to explain why they have been so dilatory in this matter.

I want to know what EPA is doing and when it will do it to meet its statutory obligations, and I hope that the witnesses today can help illuminate this point. The Congress has wrestled with this difficult issue once, and we need to know why the Administration has failed to meet its statutory obligations. And I hope our witnesses will shed some light on other pricing issues that have received attention from energy analysts in the press and I would refer specifically to the phase-out of MTBE and the effects of this transition on supply and price and ethanol from a production and transportation standpoint; the role of refined products in meeting our daily gasoline demand and the effect of market concentration in the petroleum industry.

Mr. Chairman, again, I thank you for holding this hearing. I appreciate your courtesy in recognizing me and I look forward to the testimony of the witnesses. I yield back the balance of my time.

CHAIRMAN BARTON. I thank the distinguished gentleman from Michigan and recognize the gentleman from Illinois, Mr. Shimkus, if he wishes to make an opening statement? Does the gentlelady from New Mexico wish to make an opening statement?

MRS. WILSON. Thank you, Mr. Chairman, I do. Everyone is being affected by the high gas prices both in their daily lives and also in their small businesses as they try to get their products to where they can sell them. And the cost is always passed through to the consumer, so I am glad that you are holding these hearings, Mr. Chairman, and I thank you for doing so, so that we can look at ways that we can make America more energy independent.

I think we took some positive steps last August, but now we get a clean sheet of paper to look at the problems, to understand the factors driving prices, and mitigate those factors. That includes reducing demand for refined product and that means alternative fuels, like E85 or hydrogen fuels, getting America beyond its exclusive reliance on the gasoline powered engine; hybrids that are more efficient and can reduce the overall demand for gasoline, and conservation and fuel efficiency so that we reduce the demand for imported oil.

The second thing we need to do is look at diversifying supply and that means worldwide diversification of supply so that we are not as dependent upon single points where, or single countries where there is a great deal of volatility and political uncertainty and risk. And also supply within the United States so that we can use the energy resources that we have to get that marginal barrel of oil into the market.

And finally, I am glad that we are looking at the whole supply chain and looking at the bottlenecks between getting a barrel of oil and turning it into gasoline that can be used in someone's car. Whether that is boutique fuels or the impact of regulations or expanding our refining capacity, I am glad we are looking at understanding each of these factors driving prices and mitigating them so that we make America more energy independent. And over the summer I look forward to continuing to work on these problems. Thank you, Mr. Chairman.

CHAIRMAN BARTON. I thank the gentlelady. The gentleman from California, Mr. Waxman.

MR. WAXMAN. Mr. Chairman, every American knows that gasoline prices are skyrocketing; at \$3 a gallon, prices have doubled since 2000. But not every American knows what has gone on in Washington in that time. For the last 5 years we have lacked an effective energy policy. Instead, the White House, with the support of the Republican leadership

in Congress, has showered the oil industry with subsidies, environmental exemptions, loopholes, and tax breaks. This has vastly enriched the oil companies and their CEOs, but it has not reduced America's dependence on foreign oil and it has allowed prices to skyrocket.

This chart illustrates what has happened. It superimposes the implementation of the Administration's energy policies on a graph of gasoline prices. As you can see, on May 16, the White House energy plan was announced. The Administration set out to implement their energy policy using existing authority to the greatest extent possible. By the end of the President's first term, the Administration had implemented 75 percent of its energy policy.

By March 2005, Energy Secretary Bodman announced that 95 percent of the energy plan had been implemented and throughout this whole period of time, gasoline prices have increased. There is a direct correlation between the Administration's policies and gasoline prices. The more success the President and the Vice President have had in implementing their energy policies, the higher gasoline prices go and the richer the oil companies become.

Mr. Chairman, this committee has a dismal track record on energy issues. In 2001, California and the West Coast were being gouged by Enron, Reliant, and other energy producers who were manipulating electricity prices and they were doing this to enrich themselves, yet our committee never conducted a serious investigation. Instead, our committee made up excuses. Now it appears we are about to repeat the same mistakes. I am disappointed we haven't yet scheduled a hearing with the oil company executives. Members have been seeking a hearing with these witnesses since last fall, yet instead of investigating the oil industry, there appears to be a concerted effort here in Congress to blame gasoline prices on everyone but the oil companies.

Last week there was legislation on the floor designed to blame State and local governments for high gasoline prices. Next week there may be legislation brought up that seeks to blame environmental protection. Mr. Chairman, this committee should call the executives to testify and if necessary, subpoena them and their internal records so we can understand why prices are so high, what has happened to the refining capacity. We should stop defending the oil industry and start protecting the consumers, the American people.

CHAIRMAN BARTON. I thank the gentleman. Let us see. Dr. Burgess.

MR. BURGESS. Mr. Chairman, I will submit for the record and save for questions.

[The prepared statement of Hon. Michael Burgess follows:]

## PREPARED STATEMENT OF THE HON. MICHAEL BURGESS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Mr. Chairman, thank you for convening this hearing this morning. And thanks to our panelists for coming before us today.

As we are hearing from our constituents on this topic, I think the information provided by the panelists today will help this committee get beyond the rhetoric to the facts

There are a number of factors that contribute to high gasoline prices, including: crude oil prices, refinery capacity, environmental regulations, and consumer demand. As we learned during our hearing on World Crude Supply last week, approximately 55 percent of the cost of a gallon of gasoline is the crude oil.

The geography of oil and gas has led our country to place our energy assurance in the hands of leaders such as Venezuelan President Hugo Chavez and inflexible or unstable dictators of the Middle East. Last week, several panelists, including Dr. Daniel Yergin, referenced the "risk premium" associated with ongoing concerns about the stability of supply from Russia and the Nigeria Delta Region, as well as the impact of Iran's nuclear posturing and the recent nationalization of energy infrastructure in Bolivia.

All of these geopolitical uncertainties make foreign oil unpredictable and unaffordable. The best way to bring down prices is to increase supply while decreasing this risk premium. That means we need to increase not only production, but <u>domestic</u> production. Today, we import nearly 60% of our oil, but we've prohibited exploration in the OCS, in ANWR, and on other federal land.

I believe we should allow, and in fact, encourage exploration and production here at home. A barrel of oil coming from the Gulf Coast or the oil shale in Utah is significantly safer than a barrel of oil coming from Iran. That is the surest way to bring down gasoline prices in the short run.

However, there is another phenomenon affecting the price of gasoline, especially in the Dallas-Fort Worth Metroplex, and that is the transition from methyl tertiary butyl ether (MTBE) and ethanol. Areas, such as the Dallas-Fort Worth Metroplex, which use RFG to meet Clean Air Act requirements during the summer driving season, have been more heavily impacted by this fuel switching.

Not only has there been an inadequate supply of ethanol to meet the demand, there have been logistical problems due to the different physical characteristics of the two substances.

Unlike gasoline containing MTBE, gasoline containing ethanol is not able to be transported via pipeline, which means that the ethanol must travel via truck and rail and mixed once it arrives to the area in which it will be used. All of these factors further push up the price at the pump.

Another factor, affecting the price of gasoline is the patchwork of different "boutique" fuels in use across the country. Non-federal fuel specification requirements reduce the fungibility of gasoline. That means that gasoline that can be used in Lubbock cannot be used in Fort Worth. Gasoline used in Utah cannot be used in Chicago. This limited inability to move gasoline across the country in response to local demand results in increased prices at the pump.

I am looking forward to hearing from our panelists today about how gasoline prices are set in general, and specifically how they are impacted by the transition from MTBE to ethanol and by the use of "boutique" fuels.

I'd like to thank our panelists again for giving up their time to testify before us this morning. And with that, Mr. Chairman, I yield back.

CHAIRMAN BARTON. Okay, Mr. Pitts.

MR. PITTS. Thank you, Mr. Chairman. Few issues are of more concern to Americans these days than gasoline prices and while we have addressed the issue with a number of legislative proposals in recent days, the truth is that there is no quick fix to this problem. Arriving at real solutions will require us to take a long-term approach to the basic principle at work here, supply and demand. Windfall taxes, price controls, and new regulations are exactly the sorts of things we don't need. You could eliminate all of the profit of the oil companies and you would only reduce the price of gasoline by nine cents a gallon, I am told. In fact, one of the best things Congress can do is just get out of the way. In a free market economy, prices will always be high when demand rises, and supply is tight and that is what we are seeing right now.

The fact is that America is not making full use of its own oil supply. Allowing access to the billions of barrels of oil in ANWR and off our coast is a common sense start. We should make that a reality this year. Removing the red tape required to build new refineries in America is another step in the right direction. Streamlining fuel regulations, reducing the number of blends required would also help. No amount of quick fix political posturing will help Americans at the pump. We need real energy solutions and real energy solutions must include forward-looking supply improvements like these. We need to be less dependent on foreign sources of oil; that is a matter of national security.

I look forward to hearing the testimony of our witnesses today. I thank them for coming to share their expertise and I yield back.

CHAIRMAN BARTON. I thank the gentleman. The gentlelady from California, Ms. Eshoo.

Ms. Eshoo. I will wait for the questions, Mr. Chairman.

CHAIRMAN BARTON. Okay. Mr. Stupak.

MR. STUPAK. Thank you, Mr. Chairman. I am pleased we are having committee hearings on the burden that high gas prices places on American consumers. As Ranking Member of the Energy and Commerce Subcommittee on Oversight and Investigations, I have asked for eight months for hearings on the cause of high gasoline and natural gas prices. I am pleased that the chairman has finally realized that these hearings are needed and I hope we will continue these discussions about what Congress can do to ease energy prices.

At this time last year gasoline was selling at an average of \$2.18 per gallon. Currently, gas is at \$2.90. This is a 72 cent increase. While switching from winter to summer seasonal blends can have some affect on prices, a 72 cent increase over last year, when we were also undergoing summer blend changes, is not acceptable. This excuse is getting old. Obviously, other factors need to be addressed. With regard to MTBE, oil companies have known for years that MTBE is a bad

product. Oil companies knew they would be unable to continue to use MTBE and should have planned accordingly.

As for boutique fuels, as part of the energy bill approved last summer, Congress has already capped the number of boutique fuels and has directed the EPA to study whether boutique fuels need additional regulation. The EPA estimates that boutique fuels currently add only three cents per gallon, sometimes less. While there is a potential for shortages and increased costs should a production or a supply disruption take place, Congress has already granted the EPA the authority to issue boutique fuel waivers should such a situation arise. Unfortunately, this committee seems to be searching and continuing to rely on the oil companies for their excuses and scapegoats rather than investigating problems and finding serious solutions.

Instead of focusing on things like transition to summer fuel blends, a phase-out of MTBE, and the use of boutique fuels which either have a minimal effect on gas prices or have already been addressed by Congress, we should be holding hearings on factors that have so far been unaddressed. This committee should be investigating whether the substantial profits currently made by the oil and gas companies are warranted, or whether these profits are the result of unfair predatory pricing and market manipulation, and pass a real price gouging bill.

We should be holding hearings on my legislation the, Prevent Unfair Manipulation of Prices, or PUMP Act, to bring oversight and transparency to over-the-counter trading of energy commodities which are currently unregulated by the Federal government. We should have the foresight to investigate natural gas prices. High natural gas prices are already affecting farmers, manufacturing and electrical utilities, along with other industries. The EIA has projected that natural gas prices will be significantly higher again this winter. Rather than wait until this winter, we should address the issue now. As the EIA has told us since before Hurricane Katrina, gasoline and natural gas prices are going to stay high under the current climate.

Our constituents are waiting for Congress to take action to address these high energy prices, like my PUMP legislation. I welcome the witnesses and I look forward to their testimony and I yield back, Mr. Chairman.

CHAIRMAN BARTON. We thank the gentleman. Mr. Gillmor.

MR. GILLMOR. Thank you, Mr. Chairman, and I commend you on your swift action to address the recent rising energy prices. The matter of rising energy prices is an issue that impacts real lives and has real consequences and often we hear our gas prices affect urban commuters, vacationers and the transportation industry, while little is said about the growing hardship that rural Americans face on a daily basis. Farmers, in

particular, are faced with the prospects of a difficult future as a continuing rise in energy prices makes it harder for them to gas up their tractors and combines and purchase necessary fertilizer.

Additionally, in an already hyper-competitive rural economy, the manufacturing community faces the realization that it will be necessary to raise prices on their products as their structural costs continue to skyrocket. Mr. Chairman, rural communities are already at an inherent disadvantage due to the proximity to suppliers and to the limited choice of suppliers. As the committee continues to address this matter of national importance, I would urge all my colleagues to not forget the challenges of rural areas like my district in northwest Ohio face as a growing threat to our manufacturing preeminence posed by rising gasoline prices. Thank you for yielding time and I yield back.

[The prepared statement of Hon. Paul Gillmor follows:]

PREPARED STATEMENT OF THE HON. PAUL GILLMOR, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO

I first would like to commend the swift action you have taken to address the growing problem of rising energy prices.

The matter of rising energy prices is not the latest public policy trend, nor is it an issue to be politicized. Rather, this is an issue that impacts real lives and has real consequences.

Often we hear about how gas prices affect urban commuters, vacationers, and the transportation industry. However, little is said about the growing hardships that rural Americans face on a daily basis. Farmers, in particular, are faced with the prospects of a difficult future as the continuing rise in energy prices makes it harder for them to gas-up their tractors and combines and purchase necessary fertilizer. Additionally, in an already hyper-competitive global economy, the manufacturing community faces the realization that it will be necessary to raise prices on their products as their structural costs continue to skyrocket.

Mr. Chairman, rural communities are already at an inherent disadvantage because of proximity to available supplies and limited choice of suppliers. As this committee continues to address this matter of national importance, I would urge all of my colleagues to not forget the challenges that rural areas, like my district in Ohio, face as well as the growing threat to our manufacturing preeminence posed by rising gasoline prices.

Thank you Mr. Chairman for yielding me this time and I look forward to the testimony from our invited witnesses and to working with you to ensure that the needs of rural communities are properly addressed.

CHAIRMAN BARTON. The gentleman yields back. The gentleman from Texas, Mr. Green.

MR. GREEN. Thank you, Mr. Chairman. Mr. Chairman, I want to thank you for holding this extensive hearing today and tomorrow on fuel supplies. Americans are upset about the gasoline prices that are the highest since the oil embargo in the 1970s. And then I come from Texas, a border State, and we hear a lot about immigration in our office, but gas prices are the biggest concern. Even though we produce and refine and

pipeline a lot of it, we still pay the same prices as everyone else. In fact, it bothers me when stations in my own district where we produce and refine are very much higher than some other parts of the country. I know the reasons for it, though.

Unfortunately, we have been hit by a perfect storm on gas prices in the last few years. One, major instability in producing countries in the Middle East, Africa, Latin America; increasing consumption from new drivers in China and India; powerful hurricanes in the Gulf of Mexico; longstanding Congressional bans on domestic drilling, and a difficult switch from MTBE to ethanol. Some of these factors are beyond our control, such as demand in China and India or even the hurricanes in the Gulf, and some of the factors are the result of Congress, such as the bans on drilling. And some of them are actually the fault of the Administration when we see that our energy bill passed last year and just in the last few days, as the EPA started to work on ways that they can streamline it.

During the debate on the energy bill last year when we eliminated MTBE, there were some of us who kept saying there is going to be a problem and all of a sudden we do have the problem; when you add it to the time of year and the other things that we have no control over, then it becomes a big problem. I support faster permitting in expanding the refineries and building new ones, but permits aren't the reason we have high prices. It makes a good sound bite to say we haven't built a refinery in 25 years, but what matters is the barrels per day. Refining capacity has steadily increased for the last 10 years and it will increase further in the new couple of years.

If we could streamline some of the red tape without altering our environmental standards, I am for it. Boutique fuel legislation is much complicated because the tradeoffs are with clean air and prices are impossible to avoid. Some folks are trying to take advantage of the high prices to push their favorite cause, whether it is CAFE standards, investigating oil companies, ethanol, regulation, or so on. But I see we have three options. The status quo is a variety of State and Federal fuels that give us the best mix of price and quality when times are good. However, the system is vulnerable to disruptions.

If we want flexibility during disruptions, we could go to fuel that is still clean fuel, but prices will likely go up since clean gasoline is more expensive to produce. We could also go to fuel but less clean fuels to keep prices level, but then manufacturing industries will be required to make up the difference to meet our clean air standards in our urban areas. I know our constituents are calling for a quick fix, but I am afraid that we are not going to see that silver bullet today or tomorrow, but there are a

lot of things we can do to help alleviate it over a period of months. Thank you, Mr. Chairman.

CHAIRMAN BARTON. Thank you. Ms. Bono.

Ms. Bono. Thank you, Mr. Chairman, and thank you for holding this hearing today. I realize the entire Nation is suffering from this crisis. I know that the people of the 45<sup>th</sup> Congressional District in California are paying more for gas than the rest of the country. That, coupled with the high summer cooling costs in the desert Southwest make for a very difficult time ahead. But those of us in Congress and our constituents at home are smart enough to realize that there is no single solution to this problem we face today.

Last week we examined world oil prices and how a thirsty Chinese economy, a brash Russian march on the energy market, and a very unstable Iran impact the price we pay for oil. Today one aspect of the problem that deserves our attention is how we can use the very oil which lies under American soil. Currently, there seem to be some problems in tapping this resource. For instance, if you talk to many domestic producers, they might comment on how the prices they are getting for their oil is too low and how that threatens to put them out of business. We are not talking about \$70 a barrel, but rather \$22 to \$35 a barrel for domestic oil. Imagine creating incentives to encourage our small independent producers to bring their oil to market.

While we have many dimensions to the supply side of the problem, we also need to turn our focus and American ingenuity on the demand side of the equation. Let us face it. We have an addiction to oil. It is here, where not just government, but private business and even the American consumer need to take action. Whether it be hydrogen or some other form of green power, our country must make a concerted effort to expand these clean, alternative fuels.

We need to eliminate redundancy in government programs, encourage the private sector to invest in new technologies, and make it affordable and simple for Americans to make the jump to another form of fuel. Oil will always have a role in our economy, but like any good financial plan, we need to diversify. I realize this is some time off yet, but if we do not take this challenge head on, we risk oil not serving as a bridge to the future, but rather the burden to stay in the past.

Again, Mr. Chairman, thank you for holding this hearing. I look forward to hearing from our witnesses and I thank them for being here. Thank you, Mr. Chairman.

[The prepared statement of Hon. Mary Bono follows:]

## PREPARED STATEMENT OF THE HON. MARY BONO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. Chairman, I rise in support of the Markey amendment. I know the Gentleman from Massachusetts as well as Mr. Boehlert have done a great deal of work on this matter and I thank them for it.

I think it is time that we challenge the auto industry to do better. We should not underestimate America's ingenuity to get our cars to this standard in a safe manner.

This is a country that put a man on the moon so to think the smartest engineers in the world can't get us to this goal sorely undervalues the intelligence and sheer "know how" our country is known for.

Henry Ford was a man before his time, so I think he would be the first one to roll up his sleeves and go to work in solving this problem.

A challenge is a good thing. It gives us something to strive for.

So Congress must challenge the auto industry to rise above the doubts associated with our ability to do this. Our country not only needs it, but must demand it.

Thank you and I yield back.

#### CHAIRMAN BARTON. I thank the gentlelady. Ms. Capps.

Ms. CAPPS. Thank you, Mr. Chairman, for holding this hearing today and welcome to our witnesses. The high price of energy is indeed a serious problem facing our country today. My colleague, Mary Bono, and I have gasoline prices in our districts that are probably some of the highest in the Nation, with \$3 per gallon prices now a distant site in the rearview mirror. I hope this hearing today will explore some of the reasons behind this problem. Having read through some of the testimony, I find myself most in line with the emphasis on industry consolidation that we will hear more of from Dr. Cooper with Consumers Union.

The industry has consolidated to a remarkable degree and this has affected competition, I believe, in a very negative way. One need only look at the refinery situation with the closing of dozens of refineries over the years, and virtually no attempt to build new ones. I know the Majority will continue to push its refineries legislation, but I believe that is completely missing the mark. The issue really isn't local and State permitting, the issue is that the industry hasn't wanted to build more refineries and that leads to a very tight supply. And almost any time anything happens--a natural disaster, seasonal changeover--gas prices spike and industry profits swell even more.

I don't think it is a big surprise that the continued record profits of the industry are causing outrage among the consumers and stomach churning among some of our Republican friends. Headlines like this from the Wall Street Journal yesterday, "Exxon's Pile of Cash Keeps Growing; Adding Fuel to the Ire Over Oil Prices," go straight to the point.

Finally, I would note that earlier this year there was a lot of talk about how the high price of gasoline was being driven by MTBE issues. It is my understanding that the Energy Information Administration, EIA, has refuted this notion and reported that the transition away from MTBE to ethanol might be adding a few cents a gallon at most, that this transition period would be short term and by next year there would be ample ethanol to meet demand.

Furthermore, it is important to note that it is the industry that is choosing to stop using MTBE, just like it was the industry that chose to start using MTBE in order to meet the oxygenate requirement. The industry has been abandoning MTBE faster than big gas prices increase at the pump because MTBE is a problem. The contamination MTBE has caused to groundwater systems and the fact that the industry will be forced to clean up that damage is what is driving the move away from MTBE.

My hope is that the problems associated with MTBE use can be worked out among the various parties in order that cleanup happens and we don't just see endless litigation. I look forward to the testimony today and yield back.

CHAIRMAN BARTON. I thank the gentlelady. The gentleman from Arizona, Mr. Shadegg.

MR. SHADEGG. Thank you, Mr. Chairman. I want to express my appreciation for you holding this hearing today. I will be brief. We will hear many reasons for the high price of gas over the next few days in these hearings; boutique fuels, transitioning to summertime gasoline, refinery maintenance, lack of refining capacity, and though I would associate my remarks to the comments of the gentlelady on the other side, it appears that the problem there is a lack of a will to build additional refining capacity.

The conversion from MTBE to ethanol and indeed, on that point, I would disagree with the gentlelady from the other side; we knew that MTBE was going to go away as a result of a litigation brought by the trial bar if we were not willing to extend any kind of protection to that industry. Now that has come to pass; MTBE is being withdrawn from the market. MTBE made up about 1.4 percent of our entire fuel supply prior to now and that now has to be fully replaced by ethanol. The list is long, but we shouldn't forget that the main reason we have high gasoline prices is that the world price for crude oil has skyrocketed.

There are a variety of reasons for that, no doubt. In part, political and economic uncertainties in oil producing countries have squeezed the world market. But in part, speculators, I believe, are also running up the cost. We need to be doing everything we can to increase domestic production of our own energy supply, including oil, so that we can

alleviate these shortages on the oil market. For one thing, we need to be pursuing alternatives to oil, but in addition to that, there are many places, as was referred to just a moment ago on the other side of the aisle, where we have locked up known supplies in the United States, on the outer continental shelf, in ANWR, in the interior west, where indeed there is ample fuel and oil that we could be going after and natural gas that we could be going after, but for political reasons we are not doing that.

I want to focus my remarks today on at least one possible short-term solution. The withdrawal of MTBE from the market as a result of the litigation brought against MTBE producers makes the current MTBE to be a defective product, has resulted, as I indicated, in a drop in the market of MTBE, which accounted for 1.4 percent of our gasoline supply. The only acceptable alternative is ethanol, yet today's domestic market cannot produce sufficient ethanol to supply the demand. We have, over time, as a Congress, chosen to tax imports of ethanol in order to encourage domestic production of ethanol. We impose a tax of 2.5 percent on the cost of the ethanol and then we impose an additional tax of 54 cents per gallon.

I would suggest that it is time to suspend, at least temporarily, those taxes. The reality is we cannot produce sufficient quantities of ethanol in the next 12 to 18 months to satisfy our demand. The EIA and others have confirmed this. We will be at least 130 thousand barrels per day short of the necessary supply of ethanol to replace the MTBE that has been withdrawn from the market. There is no reason to continue to require American consumers to pay the tax of 2.5 percent plus 54 cents per gallon on imported ethanol. If we were to lift those tariffs, at least temporarily, we would be able to bring in additional ethanol from outside of the country; we would deal both with the lack of supply, but also with the distribution problems that ethanol is currently experiencing.

There are many coastal areas where if we could import ethanol at an economic price, the cost of gasoline would go down and we would not suffer shortages as we have recently in Pennsylvania and in Texas as a result of the shortage of ethanol. This is an idea that is quickly catching on and gaining supporters. I have introduced legislation which now has over 30 sponsors; President Bush expressed his support for the idea last week on CNBC. Yesterday Majority Leader Boehner expressed his support for the idea and this morning's paper reveals that Speaker Hastert has also suggested a temporary suspension of the ethanol tariff would be a good idea.

This would give immediate relief to American fuel purchasers of at least a portion of the cost of gasoline, and I would urge that it would be in the interest of the ethanol industry because it will allow them time to build out the ethanol infrastructure that we need. Mr. Chairman, again I

thank you for holding this hearing and look forward to the testimony of the witnesses.

CHAIRMAN BARTON. We thank the gentleman from Arizona. Ms. Schakowsky of Illinois.

MS. SCHAKOWSKY. Thank you, Mr. Chairman, for holding today's hearing on gasoline prices. Seven in 10 American families believe that gas prices will cause them financial hardship this year. I hope that we can use this hearing to develop immediate plans to bring prices down as the summer driving season begins. Talk is cheap and gasoline isn't. In Chicago we are paying \$3 plus for a gallon of gasoline. Secretary Bodman has called this an energy crisis, but let us be clear; this is not a crisis for everyone. Not everyone in America is suffering. For oil companies, friends of the two oil men in the White House, President Bush and Vice President Cheney, this crisis is a bonanza and the American people know it.

At over \$25 billion, ExxonMobil reported the highest profit of any company in any year in history in 2004, and then beat its own record in 2005 with a \$36 billion profit, and this quarter ExxonMobil reported a 7 percent increase in profits over last quarter. It is certainly not a crisis for ExxonMobil's CEO, who is retiring with a \$400 million retirement package. The overall U.S. economy, however, is suffering. A recent Wall Street Journal headline declared fuel prices keep economic growth in limbo, reducing our total GDP by 7 percent.

Last Friday I met with small business owners in Chicago to discuss how a rise in gasoline prices was crippling their business. I spoke with a restaurant owner who has been forced to charge more for delivery, cut his distribution area at the same time as his food suppliers have added a transportation cost for their services and he has had to hike menu prices, he has lost business and upset some loyal customers. So those people are feeling the pain, they are making the sacrifices. The only ones from whom nothing has been asked at all are the oil companies. And instead, the oil companies are being lavished with benefits and environmental exemptions. In the last big energy bill we gave them about \$11 billion in tax breaks, a bill that even the Energy Information Administration at the time said could raise gas prices and it has.

Talk about increasing refinery capacity, we know that between 2004 and 2005 refineries marked up their prices 255 percent while gasoline retailers only marked theirs up about 5 percent. More refinery capacity? In the 1990s the American Petroleum Industry sent letters, memos to the oil companies saying if you want to increase your profit, you know what you have to do? You have to decrease your refining capacity and that is exactly what has happened.

We have legislation proposed by Mr. Boucher and Mr. Dingell that would actually do something by creating a national refinery reserve. That has been rejected. There are things we could do. Senator Durbin, my Senator in the Senate, is the sponsor of the Windfall Profits Tax Act, which would enact a 50 percent windfall profits tax on profits earned above the base price of \$40 a barrel of oil, adjusted for inflation. The revenue collected would be rebated to consumers. We could do it now. Invest it in energy efficient vehicles and in a low-income energy assistance trust fund.

And so we need to perhaps have these hearings, but what we really need to do is answer what consumers are asking for, some relief at the pumps. Thank you, Mr. Chairman.

CHAIRMAN BARTON. Thank you. Mrs. Blackburn.

MRS. BLACKBURN. Thank you, Mr. Chairman. I will welcome our witnesses and waive my statement and look forward to extra time for questions. Thank you.

CHAIRMAN BARTON. Chairman Buyer.

MR. BUYER. I waive my time, Mr. Chairman.

CHAIRMAN BARTON. Okay. Ms. Baldwin.

Ms. Baldwin. Thank you, Mr. Chairman. Every year around Memorial Day, Wisconsinites start to notice a change in the price at the pumps and this year is different only that we have felt that pinch well before the holiday. We have urged the President and this Congress to act on gas prices. Instead, Congress last year passed an energy bill that did nothing to relieve the pain at the pump. Even the Department of Energy acknowledged at the time that the Energy Policy Act of 2005 would do next to nothing to lower gas prices or reduce America's demand for foreign oil.

Now, a year later, we could continue down the road that encourages reliance on finite natural resources and simply assumes that we can reduce our dependence on foreign oil without any strategy to get there. This, of course, means creating policies and incentives that inspire no one except the CEOs at the big oil companies. Or we could change course and encourage our Nation to think big and make important decisions about where we want to see our Nation in the coming years.

Included among our options are lowering the number of boutique fuels or establishing a regional gas reserve so that the next time there is a massive hurricane or other disaster, our gasoline supply can reach the stations without interruptions. Independently, these proposals will not resolve the problem of high gas prices around Memorial Day or any time of year, but through a collective and coordinated effort, we will be able to lower gas prices and reduce our dependence on foreign oil.

Our efforts must begin with more encouragement for the production of renewable fuels. I am proud to report that Wisconsin is doing its part in the production of alternative fuels. Ethanol production in Wisconsin is up from 90 million gallons in 2004 to over 200 million gallons today and as more plants become operational, Wisconsin will be producing an estimated 500 million gallons annually. Wisconsin is clearly not fighting this battle alone and I hope that our witnesses today and tomorrow will bring big thoughts around real steps our Nation can take to improve our energy policy, changes that bring relief to the pocketbooks of Americans and not just the special interests.

I look forward to the testimony at this hearing today and tomorrow and I yield back my remaining time, Mr. Chairman.

CHAIRMAN BARTON. We thank the gentlelady. Ms. Solis.

Ms. Solis. Thank you, Mr. Chairman, and Ranking Member Dingell, for holding this very important hearing. We are here today to discuss the relation between gas prices, supply, and distribution, and I would like to point out, out of curiosity, why we don't have any oil company executives here to testify. Oil companies are an integral part of the supply and pricing and distribution chain for gasoline. These companies raked in \$110 billion in profits in 2005 and \$16 billion in the first three months of 2006. Mr. Chairman, I encourage you to bring the oil company executives before this committee for a frank discussion about their role in the supply, price, and distribution of gasoline.

I would also like to insert into the record a letter from the Environmental Council of States which is relevant to the discussion. According to the Environmental Council of States, "It is unaware of any credible report that concludes that the time States take to review environmental permits has been or is a significant impediment to the issuance of refinery permits. We do not believe that such documentation exists." The Los Angeles Business Journal reported that the average price per gallon of gasoline at self service stations in Los Angeles rose 16 cents this week, to nearly \$3.50 a gallon.

The price of gasoline in Los Angeles is 91 cents higher than it was a year ago and statewide prices are 81 cents higher than a year ago, yet our Nation's energy policy has missed the mark. The Bush Administration's energy policy, which was developed in secrecy and more than 95 percent has been implemented, yet has done nothing to reduce gas prices for consumers. Despite President Bush's statement upon signing H.R. 6, and I quote, "Americans will look back on the energy bill as a vital step toward a more secure and more prosperous Nation."

The price of energy and the lack of reliability hurts all working families. Transportation costs have increased by more than \$1,400 per family, an increase of 75 percent since 2001. School districts in my

district, for example, have to pay more costs for fueling of school buses than they are for paying teachers and construction of vital services that we need at schools. Yet President Bush's budget significantly underfunds programs which would help working families and is failing to implement provisions included in H.R. 6 which would be helpful.

I believe that energy security, jobs and health, workplace and family can coexist, but the approaches traditionally taken by this committee try to make us choose between these priorities. This is a choice I don't want to make. I believe we need a plan to create American jobs, technology, boost competitiveness and improve our national and economic security. I hope soon we will be able to have a real discussion, real debate and have witnesses that can actually answer some of our questions. Yield back the balance of my time.

[The information follows:]



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Director, Virginia Department of
Environmental Quality
SECRETARY-TREASURER

Steven A. Thompson Executive Director, Oklahoma Department of Environmental Quality PAST PRESIDENT May 9, 2006

The Honorable Joe Barton Chairman, Committee on Energy and Commerce 2109 Rayburn House Office Building Washington, DC 20515

Dear Mr. Chairman:

This letter is in reference to the Refinery Permit Process Schedule Act.

The Environmental Council of the States is unaware of any credible report that concludes that the time States take to review environmental permits has been, or is, a significant impediment to the issuance of refinery permits. We do not believe that such documentation exists.

States have been diligent to improve their administrative processes. We do have some evidence that States are in fact reducing the amount of time they take to issue environmental permits. States have significantly improved or reduced permit processing times through process improvement techniques and methodologies such as Kaizen, Six Sigma, and Value Stream Mapping. At our recent national meeting we devoted a session in which five States (Michigan, Iowa, Delaware, Nebraska, and Minnesota) described their experiences in utilizing these techniques. Considerable efficiencies were achieved for both the permit applicant and the State. These experiences demonstrate commitment to complete environmental reviews in a timely manner.

While we understand the necessity of assuring the nation's refinery capacity, it is not clear to us that federal intervention in the State permitting process, beyond that already in the Clean Air Act, is warranted or justified.

We are ready to assist you further in this matter if you have any questions.

Sincerely,

Stephanie Hallock, ECOS President

R. Steven Brown

CHAIRMAN BARTON. I thank the gentlelady. The gentleman from Washington State, Mr. Inslee.

MR. INSLEE. I will reserve my time. Thank you, Mr. Chair.

CHAIRMAN BARTON. The gentleman from San Antonio, Texas, Mr. Gonzalez. Is there any Member who has not given an opening statement that wishes to make an opening statement? Mr. Ross of Arkansas.

MR. ROSS. Thank you, Mr. Chairman. I would like to thank you for holding this important hearing regarding rising gasoline prices and the adverse impact they are having on all Americans; Americans who are being forced to change their way of life, being forced to choose between paying their rent or putting gasoline in their vehicles. Mr. Chairman, I

represent a very large and rural district in the State of Arkansas. My district spans 21,000 square miles, 150 towns, 29 counties and most of my constituents don't even live in those towns; they live down this gravel road or that gravel road. They live in rural America.

And it is not uncommon for my constituents to drive 50 miles or more each way to and from work and in most cases they commute these distances for a job that pays well below the national average and in rural America where mass transit is not an option. Hard working Arkansans who are trying to do the right thing by working to put food on the table, to keep the lights on, and to provide for their families are being devastated by these record gas prices. In order to see true reductions in prices, we will have to either increase supply or decrease demand; ideally, both. I strongly support the continued development and use of ethanol and biodiesel as a way to reduce the demand on costly fossil fuels.

And as we continue working to increase the use of biofuels, we must make the necessary investments to develop our Nation's infrastructure to support an increased use of ethanol and biodiesel. I am committed to working with my colleagues to make these investments to advance alternative fuels which will provide Americans with a choice when they go to the pump, reduce our dependence on foreign oil, and save working Arkansans and working Americans money at the gas pump. The reality is this: the energy bill authorizes \$632 million for the next fiscal year for renewable energy research, development, demonstration, commercial application activities by the Department of Energy, \$213 million of which is for bio energy purposes, including \$100 million for bio refinery demonstration projects.

This funding is authorized but not yet appropriated. My point is this, Mr. Chairman, there is a lot of talk about investing in alternative renewable energy sources and yet we send \$1.9 billion to Iraq every week. I want to make sure the American people understand that while there is a lot of talk these days about alternative and renewable fuels, over the next fiscal year we are going to spend less than half as much money toward research and development of alternative and renewable energy as we will spend this week alone in Iraq.

I recognize that as we develop alternative fuels and flex fuel vehicles, our Nation will continue to rely on fossil fuels as a primary source of energy, therefore I believe we must promote further exploration and development of domestic oil and gas production. Mr. Chairman, I look forward to hearing from our panel and working with this committee to bring down the high cost of gas and diesel fuel and with that, I yield back the--well, I guess I am out of time. But I yield back the balance of my time, anyway. Thank you, Mr. Chairman.

CHAIRMAN BARTON. The gentleman yields back. We thank the gentleman for that statement. All Members not present have the requisite number of days to put their statement in the record, without objection, so ordered.

[The statements follow:]

PREPARED STATEMENT OF THE HON. ROY BLUNT, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MISSOURI

Mr. Chairman, thank you for holding this vitally important hearing today. As we know, the high price of gasoline is one of the major issues facing our constituents as they drive to work every day. According to the Energy Information Agency, the average price of gasoline last week was \$2.92 per gallon - that is \$0.68 more than it was just last year. Gas prices in some cities, like here in Washington, are well above \$3 per gallon.

It is my hope this hearing will provide us with an opportunity to discuss not only what led to this present situation but also to develop viable solutions. Mr. Chairman, I think this is a step in the right direction and I appreciate the effort you and other colleagues on the Committee have given this problem.

As you know, one of the issues I am very concerned about is the proliferation of boutique fuels. The number of fuels has expanded over the years, and we now have an uncoordinated and overly complex set of fuel rules that I believe is leading to increased costs and price spikes. We need to restore fungibility to the market. An editorial in Monday's edition of *USA Today* equated boutique fuels to coffee at Starbucks – unnecessarily complex and pricy.

Last year during debate of the Energy Policy Act of 2005 we worked very hard to secure a cap on existing boutique fuels to ensure this problem could not worsen. This was a great first step toward solving the problem. We also gave the EPA the authority to temporarily waive certain fuel specifications during unforeseeable fuel supply emergencies. As we saw, that was extremely important during the aftermath of Hurricane Katrina. Without that authority emergency responders would not have even had the ability to bring needed supplies and buses would not have been able to evacuate victims.

I believe we need to take the next step in simplifying our fuel system. We need to also look at the ability of EPA to deal with temporary waivers and even at enhancing that authority.

Mr. Chairman, once again thank you for opportunity to offer this opening statement and I look forward to working with you and the Committee on these complex issues.

I vield back.

PREPARED STATEMENT OF THE HON. SHERROD BROWN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO

Thank you, Mr. Chairman.

Today's hearing is something of an exercise in frustration for me. Because it reminds me yet again that a White House and a congressional leadership so intimately tied to Big Oil is more than happy to talk about policies to protect consumers from gas price spikes. But steadfast in its opposition to actually acting on common-sense ideas.

Dr. Mark Cooper, of the Consumer Federation of America, will testify before us today.

And he will tell us that regional gasoline price spikes – like the ones that hit the Midwest in 2000 and 2001 and the one that hit the Southwest in 2003 – are symptomatic of Big Oil's historic business practice of maintaining low reserves.

By maintaining low reserves, Big Oil can create a situation where consumers have no cushion against price spikes – if a refinery fire, a pipeline outage, or some other regional supply disruption occurs.

And Dr. Cooper will testify that one common-sense policy response is for the government to provide that cushion for consumers – in the form of a government-run gasoline reserves system.

That should be a familiar message to us in Congress. Dr. Cooper has delivered that same message to us before – in this committee and in others.

And I have offered legislation to implement that idea myself:

- I offered a gasoline reserves amendment in this committee in 2003 it was opposed by the Chairman and defeated
- I offered that amendment on the House floor it was opposed by Republican leadership and defeated
- I offered it again as an amendment in 2005 twice and it was opposed by the Chairman and defeated both times

Several other industrialized nations maintain gasoline reserves – and they used them last year to ship us gasoline after Hurricane Katrina. That embarrassed the Bush Administration into at least recognizing the idea.

Last October, Energy Secretary Bodman testified before the U.S. Senate that the gas reserves idea was being "looked at" by the White House, "quite closely." Welcome news, I'm sure, to Senator Dick Durbin – who's sponsored a bill similar to mine.

But that was 6 months ago – and though the price of a gallon of gas has increased about 45¢ since then, the White House is still studying an idea we've known about for years and that our allies have already used successfully to bail us out.

The facts are clear and simple. American consumers are hurting at the pump today, because Republican leadership rejected common-sense reforms that could have protected consumers and strengthened our economy – in favor of an energy policy written by – and for the benefit of – Big Oil.

I am glad President Bush has at least begun to talk about reform. And I am glad we are here talking about it again here today.

But talk is cheap, and gas is not. The American people need action.

## PREPARED STATEMENT OF THE HON. BARBARA CUBIN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WYOMING

Thank you, Mr. Chairman.

My home state of Wyoming, like the rest of the country, has faced record breaking prices at the gas pump for much of the last year. In our state, where driving is a necessity due to an essentially nonexistent mass transit system, these exorbitant fuel costs create a real problem commuting to work or even planning a family vacation.

Pinpointing the reasons why gasoline prices are currently so high is not the problem. Domestic production and refining capacity simply haven't kept pace with our nation's ever-increasing demand for oil. Other short term factors, such as the fact that refining capacity in the gulf coast region is still not fully operational, has only added to the problem. However, the biggest challenge I believe we face is the continuing obstructionism here in Washington that prevents the enactment of common-sense reforms to encourage increased domestic production.

It took almost five full years to get a comprehensive energy policy signed into law. We are still fighting to get much needed legislation enacted that would streamline the overly-bureaucratic process for citing new refineries in our nation. Several other well-intentioned federal laws that have unfortunately created regulatory roadblocks to increasing domestic production - such as the National Environmental Policy Act (NEPA)

- are in significant need of reform. If we would have enacted all these reforms five years ago, we would not be in the situation we are in today.

I believe Congress needs to act aggressively and creatively to lower the cost of gas American consumers are being forced to stomach. From increasing our nation's refining capacity to limiting the number of "boutique fuels" that have propped up gasoline prices through artificially supply limits, there are additional long-term solutions we can and must pursue. In the short term, I have supported – and will continue to support – temporarily suspending the federal gas tax and ensuring that price gouging is not occurring at any level of the wholesale or retail gas markets.

I am hopeful that this hearing will continue to shed additional light on those steps Congress should be taking to help stabilize the price of gas. However, until our colleagues in the minority agree to place policy above politics, we will likely be unable to have the effect American consumers deserve.

I thank the Chairman for holding this important and timely hearing today and I yield back the balance of my time.

## PREPARED STATEMENT OF THE HON. CLIFF STEARNS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. Chairman, thank you for turning this Committee's focus to gasoline issues. While last week's look at crude oil markets was illuminating, we now get back to more familiar issues on which we have legislated in the past and which have a serious impact on the price of gas at the pump. In particular, I expect that the use of reformulated gasoline in the supply chain will dominate our discussions.

The physical properties of ethanol, for instance, make it somewhat daunting to work with. We cannot ship gasoline mixed with ethanol via pipeline, because there tends to be residual water in the pipes, and ethanol is water-soluble. So, we must send the gasoline through the pipes, and the ethanol separately on trucks or rails, to be blended at terminals in what is called "splash blending." This adds to the burden on the infrastructure for transportation and storage of gasoline, ethanol, and their blends, as well as raising the overall price tag.

Of course, even with a sufficient supply of ethanol, sources are not always located in close proximity to where we need the ethanol. That is one reason why I have supported research into biofuels at the University of Florida, in hopes of developing cost-efficient and environmentally-suitable agricultural alternatives for creating ethanol.

Meanwhile, government mandates for specially reformulated gasoline across the country have led to a proliferation of boutique fuel requirements – each region or metro area demanding a different blend in order to meet certain air pollution goals under the Clean Air Act's National Ambient Air Quality Standards, particularly for ozone. The USA Today, finding at least 15 different fuel blend categories, declared yesterday that, "Gasoline is becoming like coffee at Starbucks – unnecessarily complex and pricey." I look forward to hearing from Acting Assistant Administrator Wehrum about the Environmental Protection Agency's implementation of provisions we passed in last year's Energy Policy Act, and their efforts to reduce the number of boutique fuel requirements.

Mr. Chairman, thank you again for holding these two days of hearings.

CHAIRMAN BARTON. We now want to hear from our first panel of expert witnesses on our hearing on Gasoline: Supply, Price, and Specifications. We are going to hear first from Dr. Howard Gruenspecht, the Deputy Administrator of the Energy Information Administration, and then after him, Mr. William Wehrum who is the Acting-Assistant

Administrator for Air and Radiation at the Environmental Protection Agency. Gentlemen, welcome. Dr. Gruenspecht, we will recognize you for let us see here. Let us say about 8 minutes and if you need a little more time, that is fine.

MR. GRUENSPECHT. I will try to give back some time, if I can. CHAIRMAN BARTON. We are glad to have you before the committee. You are recognized.

STATEMENTS OF HOWARD K. GRUENSPECHT, DEPUTY ADMINISTRATOR, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY; AND WILLIAM WEHRUM, ACTING-ASSISTANT ADMINISTRATOR OFFICE OF AIR AND RADIATION, U.S. ENVIRONMENTAL PROTECTION AGENCY

MR. GRUENSPECHT. Thank you very much, Mr. Chairman and members of the committee. I appreciate the opportunity to appear before you today to discuss gasoline supply, prices, and specifications. EIA is the independent statistical and analytical agency within the DOE. We don't promote, formulate, or take positions on policy issues and our views should not be construed as representing those of the Department or the Administration.

Retail gasoline prices more than doubled from the beginning of 2004 through early September 2005 in the aftermath of Hurricane Katrina. Though gasoline prices declined last fall following the hurricanes, U.S. average regular gasoline price is once again near \$3 a gallon with many areas above that mark, as we have heard, particularly California. Several different factors have contributed to the sharp increase in the price of gasoline seen in recent years. First and foremost, as many of the opening statements recognize, the price of crude oil, from which gasoline and other petroleum products are refined, has risen dramatically.

The price of West Texas intermediate crude rose from roughly \$40 a barrel at the end of 2003 to between \$70 and \$75 per barrel on the spot market during the first week of May. Futures prices are also close to this level and even the long-term futures contracts are pretty high, well above \$65. All else equal, each \$1 increase in the price of crude adds about 2.4 cents per gallon to the price of gasoline. The increase in crude oil prices accounts for roughly two-thirds of the increase in retail gasoline prices since the end of 2003.

Second, gasoline prices are directly affected by the balance between supply and demand for gasoline, itself. Both long-run forces and shortterm circumstances since last fall have contributed to a tight gasoline market. This has led to an increased crack spread between the price of gasoline at the refinery level and crude oil prices, reflecting changes in both the cost and profitability of refining gasoline.

Starting with the longer run forces, U.S. gasoline demand has grown 1 to 3 percent per year since the late 1980s, driven by growth in population, the number of vehicles, and the economy. Average fuel economy of new light duty vehicles has been relatively flat. Gasoline prices do have an impact on consumption, reflecting both travel and vehicle purchase decisions, but some of those decisions take a long time to take effect.

That influence is difficult to isolate from other influences. Rising income causes demand to grow at the same time that rising prices would tend to pull back demand, but the impact of prices on demand appears to be growing in an era of sustained higher prices. Currently available data suggest that the Nation's gasoline consumption was flat in 2005. On the supply side, refinery capacity growth and refinery capacity has grown, but it has lagged behind demand growth over the past 5 years. The situation may be changing, however.

Significantly higher financial returns to refining over the past several years provide a strong incentive for refinery expansion. With attractive returns and available resources, we are now seeing significant capacity expansion announcements totaling approximately 1.5 million barrels a day of new distillation capacity planned over the next several years. And there is probably some additional capacity creep beyond that that we would expect.

The role of imports has grown in the past several years. About 10 percent of our gasoline supply comes from imports, most of which go to the East Coast. Much of the recent growth has been from Europe, which has excess gasoline supply capacity, in large part because of their major move towards use of more diesel-fueled cars, and they produce gasoline that is very similar to our own and meets our standards. At the same time, imports from Latin America have been dropping a little bit as supply from Brazil and other parts of Latin America have not moved as rapidly to the low-sulfur, very clean fuels that we are moving toward. We may see a further falloff over time.

In terms of the shorter run activities, since last fall, several events have exacerbated the current tightness in the markets. Many of the opening statements referred to the elimination of MTBE from reformulated gasoline and the resulting increase in the use of ethanol. Again, a lot of that transition has taken place by the first week of May. This decision was driven both by State policy, due to water contamination concerns, and potential for or a perceived potential for increased liability exposure because of the elimination of the oxygen

content requirement for reformulated gasoline in the Energy Policy Act of last year.

As discussed in my written testimony, the switch from MTBE to ethanol has several supply impacts. The transition on the East Coast resulted in some temporary terminal outages in the winter-grade to summer-grade transition and also the MTBE-to-alcohol transition. The outages definitely raised some concerns and EIA had talked about that in some reports in February and earlier, but no major shortages have occurred. The largest problems, unfortunately, Mr. Chairman, have been in Texas where rail bottlenecks are making ethanol delivery difficult. The problem is not yet fully resolved, yet much of the initial transition is behind us and we are going to continue to monitor the situation closely.

The other important short-term circumstance has been the lingering effects of Hurricanes Katrina and Rita, which caused significant damage to several refineries. In addition, while those refineries are coming back, some refineries had delayed their maintenance schedules last fall when much more refinery capacity was out and thus there has been a lot of capacity in maintenance, really, for longer than usual this spring. We estimate that about one million barrels per day of refinery capacity was off line during April, which is about 6 percent of U.S. capacity. Again, we expect these refineries to return. Hurricane-damaged refineries--the last of those are still returning, so the situation should improve somewhat.

On fuel specifications, cleaner-burning motor fuels generally require more processing; they are harder to produce, and they use a narrower range of fuel components, which all work to increase their production cost. Some requirements are imposed at the Federal level, but in many cases, the States and regions set them as part of their clean air strategies, as I am sure Mr. Wehrum will discuss. As the number of distinct fuel types has increased, there is an increase or a reduction in the fungibility of fuels across locations.

But there is really no simple fix because actions to ease distribution problems by reducing the number of gasoline formulations enhance fungibility, but they could also impact the U.S. refiners' ability to produce enough gasoline to meet overall demand. Considerable investments that might otherwise be devoted to capacity expansion could be diverted to building the systems needed for more intensive processing and there would be more limited opportunity to divert some of the components that are harder to use to make the clean gasoline.

So you have sort of a tough tradeoff between the potential for shortterm regional disruptions that cause price spikes and increasing production challenges to make more clean gasoline. Let me end by turning a little bit to the outlook. We think the world oil market is tight; as we have been saying for some time, we think crude oil prices will remain high. Our current projection for WTI crude prices averages \$68 per barrel in both 2006 and 2007. We expect this year's summer gasoline prices to average \$2.71 per gallon, 34 cents higher than last summer's average. We expect prices to fall over the summer. The key uncertainties are, not surprisingly, the potential for hurricanes that could impact refining and production in the Gulf region, and geopolitical factors affecting crude oil prices. And with that, I am done and I guess I didn't meet my goal. Thank you.

[The prepared statement of Howard Gruenspecht follows:]

PREPARED STATEMENT OF HOWARD GRUENSPECHT, DEPUTY ADMINISTRATOR, ENERGY INFORMATION ADMINISTRATION, U.S. DEPARTMENT OF ENERGY

Mr. Chairman and Members of the Committee:

I appreciate the opportunity to appear before you today. The Energy Information Administration (EIA) is the independent statistical and analytical agency within the Department of Energy. We are charged with providing objective, timely, and relevant data, analyses, and projections for the use of the Congress, the Administration, and the public. While we do not take positions on policy issues, our work can assist energy policymakers in their deliberations. Because we have an element of statutory independence with respect to our activities, our views are strictly those of EIA and should not be construed as representing those of the Department of Energy or the Administration.

Gasoline is an essential commodity to most Americans. Not only is our country the world's biggest petroleum consumer, but to a far greater extent than the world in general, we consume that petroleum in the form of gasoline. Gasoline accounts for about 45 percent of U.S. petroleum consumption, or about 18 percent of our total energy demand. Retail gasoline prices more than doubled from the beginning of 2004 through early September 2005, in the aftermath of Hurricane Katrina. Though gasoline prices fell back sharply last fall following initial recovery from the hurricanes, the U.S. average regular gasoline price is once again around \$3 per gallon, with many areas already over that mark.

Several different factors have contributed to the sharp increase in the price of gasoline seen in recent years. First and foremost, the price of crude oil, from which gasoline and other petroleum products are refined, has risen dramatically. Second, the balance between the supply and demand for gasoline has tightened. As discussed below, both long-run forces, such as demand for gasoline growing faster over the past 5 years than the capacity to supply it, and shorter-run circumstances, such as the elimination of methyl tertiary butyl ether (MTBE) from reformulated gasoline (RFG) on a nationwide basis and the lingering effects of hurricanes Katrina and Rita on refinery availability and maintenance schedules, are contributing to this tightness. These factors combined to increase the "spread" between the average spot gasoline price and the spot price of crude oil from about 15 cents per gallon at the beginning of March to a peak of about 60 cents per gallon in the middle of April. This gasoline price spread has since fallen back somewhat, but through March and April the spread averaged about 40 cents per gallon, about 20 cents per gallon higher than seen during more typical market situations during these months.

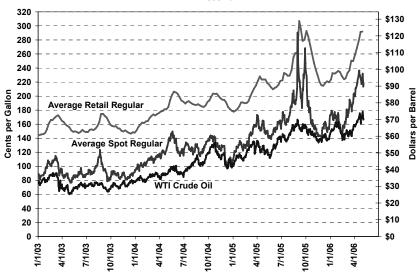
As requested in your invitation, my testimony discusses the factors affecting gasoline supply and prices, including the effects of fuel specifications and the increased use of ethanol on the market, and reviews EIA's gasoline market outlook.

#### **Factors Affecting Gasoline Supply and Prices**

#### **Crude Oil Prices**

The price of West Texas Intermediate (WTI) crude rose from roughly \$40 per barrel at the end of 2003 to between \$70 and \$75 per barrel on the spot market during the first week of May 2006. Futures prices are also close to this level. All else being equal, each \$1 increase in the price of crude oil adds about 2.4 cents per gallon to the price of gasoline. As shown in **Figure 1**, the increase in crude oil prices accounts for roughly two-thirds of the increase in the average retail gasoline price since the end of 2003.

Figure 1 CRUDE OIL, SPOT GASOLINE AND RETAIL GASOLINE PRICES, 2003 to Present



At this Committee's hearing May 4th on crude oil markets, EIA Administrator Caruso outlined our perspective on the forces driving crude oil prices in today's marketplace. To summarize briefly, crude oil prices are set in the global marketplace and largely reflect the fundamentals that determine supply and demand. In recent years, increases in global oil production capacity have struggled to keep pace with rapidly growing demand, particularly in China, the other emerging economies in Asia, and the United States. This slower growth in productive capacity relative to growth in demand has resulted in a decline in global surplus capacity to produce crude oil. At the same time, perceived risks to supply posed by geopolitical instability and other uncertainties have grown. In the present environment, with a minimal cushion of surplus upstream and downstream capacity to meet disruptions in supply and with futures markets in contango (i.e., a market in which prices for commodities delivered in future months are higher than for those delivered in months closer to the present), market participants have a strong demand for inventories, so the traditional inverse relationship between inventory and price levels does not apply. Absent an unexpected downturn in global economic activity, neither demand-side nor supply-side corrections will come quickly; thus, crude oil prices are expected to remain at relatively high levels, supporting high gasoline prices for the foreseeable future.

#### The Supply-Demand Balance in Gasoline Markets

Beyond the cost of crude oil to refiners, gasoline prices are directly affected by the balance between supply and demand for gasoline itself. The difference between gasoline prices at the refinery level and crude oil prices, often referred to as the "crack spread," reflects both the cost and profitability of refining gasoline and depends directly on market conditions. Historically, the price differential between crude oil and gasoline has varied significantly over time due both to seasonality and factors affecting market tightness. As with any commodity, when available production capacity is strained relative to demand, the price rises to keep the market in balance by attracting additional supply and/or discouraging consumption. As discussed below, both long-run forces and short-run circumstances have contributed to a tighter gasoline market, which has led to increased gasoline crack spreads.

## Long-run forces affecting the gasoline market balance

U.S. gasoline demand has generally grown at the rate of about 1 to 3 percent per year since the late 1980s, driven by growth in population, the number of vehicles, and the economy. Gasoline demand growth can also be affected by changes in vehicle fuel economy and changes in gasoline prices. After rising from the mid-1970s to the late 1980s, the average fuel economy of new light-duty vehicles has been relatively flat over the past decade, in part due the growing share of light trucks (including pickup trucks, sport utility vehicles, and minivans) in total sales of light-duty vehicles. The impact of gasoline prices on consumption, which reflects both travel decisions and, over time, vehicle purchase decisions, is difficult to isolate from other influences, but appears to be growing in an era of sustained higher prices. Based on available data, U.S. motor gasoline consumption exhibited almost no growth in 2005.

U.S. gasoline supply comes mainly from domestic refineries, though with a significant contribution from imports. In the late 1970s, the United States had significant excess refining capacity, but a combination of growing demand and the closure of some refineries significantly raised average U.S. refinery utilization rates by the early 1990s. Since the mid-1990s, both demand and refinery capacity have grown, but demand has grown more than capacity over the past 5 years. This situation may be changing. Significantly higher financial returns to refining over the past several years have provided a strong incentive for refinery expansion. The refining industry is also completing a set of major process investments needed to meet low-sulfur fuel specifications that absorbed significant resources. With attractive returns and available resources, we are now seeing major capacity expansion announcements, totaling approximately 1.5 million barrels per day of new distillation capacity by 2010. However, much of this capacity will not be ready for several years, which leaves the U.S. market quite tight in the very near term.

In recent years, product imports have met about half of U.S. growth in gasoline demand. Product imports will remain important to the United States. About 10 percent of our gasoline supply comes from imports, most of which go to the East Coast where they supply about 25 percent of that region's demand. Much of the growth in U.S. gasoline imports during the past few years has come from European sources. An excess of gasoline supply in Europe, which derives from that region's move to diesel-fueled light-duty vehicles, has found a market on the U.S. East Coast. Furthermore, European gasoline quality is similar to U.S. quality, so European refiners can produce gasoline that meets U.S. standards. Since 2003, European gasoline import volumes increased by over 200 thousand barrels per day (almost 80 percent), notwithstanding implementation of reduced sulfur content standards in the United States.

At the same time, the United States saw a drop in gasoline import volumes of 27 thousand barrels per day from Brazil, as that country and other areas have not moved as

rapidly to low-sulfur fuels. In 2006, we may see further falloff from areas in Latin America and other regions as the United States has moved to the final phase of the Tier 2 gasoline program and the industry moves away from MTBE. In general, fewer sources of supply will be able to provide U.S.-quality imports. However, those remaining appear to have the potential to send increased volumes to the United States.

Short-run circumstances affecting the gasoline market balance

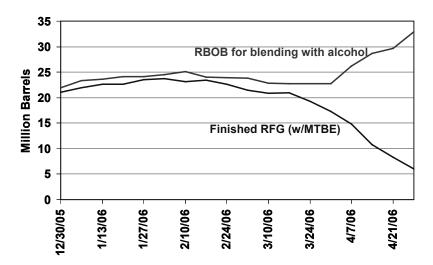
Since last fall, several events have exacerbated tightness in gasoline markets. One of these is the elimination of MTBE from RFG and the resulting increase in the use of RFG made with ethanol. The petroleum industry has moved to eliminate MTBE in gasoline by the first week in May 2006. Companies' decisions have been driven by State bans due to water contamination concerns, continuing liability exposure from adding MTBE to gasoline, and perceived potential for increased liability exposure due to the elimination of the oxygen content requirement for RFG as part of the Energy Policy Act of 2005.

Until recently, the largest use of MTBE was in RFG consumed on the East Coast, excluding New York and Connecticut, and in Texas. The other RFG areas in the Midwest, California, New York, and Connecticut had already moved from MTBE to ethanol. Most companies eliminating MTBE in the short run are blending ethanol into the gasoline to help replace the octane and clean-burning properties of MTBE. The switch from MTBE to ethanol in these RFG areas has several supply impacts:

- Net loss of gasoline production capacity. During the summer months, replacing MTBE with ethanol in reformulated gasoline results in about a 5-to-6-percent loss of production capability in order to accommodate ethanol's emission properties.
- Shift in East Coast supply sources. Without the use of MTBE, East Coast refiners are expected to produce less RFG, which will result in more RFG supply for this region coming from the Gulf Coast and from imports.
- Loss of import supply sources that cannot deliver MTBE-free product or that cannot produce the high-quality blendstock needed to combine with ethanol.
- Installation of blending equipment at terminals. Ethanol must be delivered separately to terminals near the retail market, where it is blended with base gasoline blending components before delivery to retail stations.
- A very tight ethanol market, limited in the short-run by ethanol-production capacity. Until ethanol capacity catches up, ethanol is being repositioned from discretionary blending into conventional gasoline in the Midwest to the RFG areas, and EIA expects some increase in imports.

Refiners, blenders, pipelines and ethanol suppliers have been working hard to accomplish the changeover. As shown in **Figure 2**, recent EIA weekly data show a steady decline in stocks of RFG with MTBE and a steady increase in stocks of summergrade reformulated blendstock for oxygenate blending (RBOB with alcohol), the base gasoline into which ethanol is blended. The transition on the East Coast resulted in some temporary terminal outages as terminal tanks were emptied of winter-grade reformulated gasoline in preparation to receive the first batches of RBOB with alcohol. While the outages raised some concerns, no major shortage occurred. The largest problems have been in Texas, where rail bottlenecks are making ethanol delivery difficult. This problem is not yet resolved. Still, much of the initial transition is behind us, and EIA will continue to monitor the situation this summer.

Figure 2
RECENT GASOLINE STOCK LEVELS:
FINISHED RFG (w/MTBE) and RBOB (for Blending with Ethanol)



The other short-run circumstance affecting the current market is the lingering effect of hurricanes Katrina and Rita. The hurricanes resulted in significant damage to several refineries, and one large refinery suffered an explosion that has kept it off line through April. In addition major refinery maintenance has occurred this year as a result of, among other things, delayed maintenance during the fall following the hurricanes, and final preparations for the ultra-low-sulfur diesel program that begins this June. EIA estimated that about 1 million barrels per day of capacity was offline during April, which is almost 6 percent of U.S. capacity. These refineries represent about 500,000 barrels per day of gasoline production. Maintenance outages are expected to extend only into the middle of May, and the hurricane-damaged refineries are continuing to come back online, which should help to ease prices.

## **Impacts of Fuel Specifications**

Apart from the current move away from MTBE as a blending component in RFG, the longer-term trend towards requirements for cleaner-burning gasoline and diesel fuel, while contributing to air quality improvement, has had several fuel supply consequences. In general, cleaner-burning motor fuels require more processing, are harder to produce, and restrict flexibility in using fuel components, which all work to increase their production cost. Some clean fuel requirements are imposed at the Federal level, but in many cases States and regions that are charged with developing plans to reduce emissions of air pollutants and pollution precursors in areas that do not meet ambient air quality standards adopt changes in fuel specification as one of their strategies. Such States and regions typically work with refiners to tailor gasoline specifications to meet their specific needs at minimum production cost. For example, some regions that are not required to use RFG have been able to reduce emissions of volatile organic compounds (VOCs), a smog precursor, by lowering the Reid Vapor Pressure (RVP) of gasoline used in their area to reduce evaporation. Such low-RVP fuel is cheaper to produce than gasoline that meets the complete RFG specification.

As the number of fuel types has increased, the pipeline distribution and storage system, which has a limited number of pipelines and storage tanks, is facing growing challenges to deliver many distinct fuel types in smaller batches. The reduction in the fungibility of fuels across locations has tended to slow the ability of the supply system to respond to unexpected shortfalls. If a region runs out of its specific fuel unexpectedly, it can take some time for new supply to be sent to the area. Different fuels available in the nearby surrounding areas could not be used. Delays in responding to such unexpected shortfalls add to price volatility. So far, this problem has not resulted in major problems in most regions. The two notable exceptions are California, which requires the cleanest-burning gasoline in the world, and the Chicago/Milwaukee area, which was the only region using ethanol-blended RFG during the change from Phase I to Phase II of the RFG program in 2000.

Looking ahead, unchecked fuel-type proliferation has the potential to make the distribution system even more complex and further reduce fuel fungibility, causing more regional supply and price volatility than we have experienced historically. Yet, there is no simple solution. In addition to the difficulty of balancing of environmental and fuel supply concerns, actions to ease distribution problems by reducing the number of gasoline formulations could increase average gasoline production costs and reduce overall gasoline supply capacity. For example, moving the entire country to a single very clean gasoline standard would certainly enhance fungibility, but it would also impact U.S. refineries' ability to produce enough gasoline to meet overall demand. Considerable investment in what might otherwise be devoted to capacity expansion would be diverted to building the systems needed for more intensive processing. A single product standard for gasoline, if set at very stringent levels, could also choke off imports of gasoline from some sources. Even though greater fungibility would reduce the potential for short-term regional supply shortages and price spikes, consumers could end up facing a higher national average price for gasoline than they would under the present regime. Timing, balance between supply and distribution, and potential future fuel specification and vehicle changes all need to be considered when trying to address this issue.

#### Ethanol

The United States is moving towards using more renewable fuels, in particular ethanol. Most renewable fuel use historically and over the next decade is expected to be as additives to traditional petroleum fuels, rather than as stand-alone fuels. Use of ethanol has been increasing in recent years as States have banned the use of MTBE, and gasoline suppliers have replaced that MTBE with ethanol, which helps to replace the octane and clean-burning properties lost with MTBE. In 2005, ethanol use in gasoline (263 thousand barrels per day) represented almost 3 percent of gasoline consumption by volume. The recent Energy Policy Act of 2005 added a renewable fuel standard (RFS) that requires the increased use of renewable fuels over time and includes provisions to encourage biodiesel and cellulose ethanol.

Given EIA's short-term outlook for crude oil prices and the reference case oil price projections included in our *Annual Energy Outlook 2006 (AEO2006)*, we believe that there are strong prospects for growing ethanol use. Our reference case projection for renewable fuel use significantly exceeds the requirements of the RFS program, reaching roughly 10 billion gallons annually in 2012, assuming the extension of the existing ethanol tax credit beyond its currently scheduled expiration at the end of 2010. Even without extension of the tax credit, projected ethanol use exceeds the RFS-mandated level through 2012 in our reference case. We are projecting that nearly all of the ethanol will be derived from corn, with cellulose ethanol limited to the penetration levels mandated in the recent legislation. While cellulose ethanol has potential feedstock cost advantages compared to corn ethanol and tremendous progress has been made in the

performance and cost of enzymes used in the conversion of cellulose material to ethanol, the high capital cost of cellulose ethanol plants remains a significant barrier to their economic competitiveness.

#### The Near-Term Outlook

Looking ahead, the prospects for significant near-term improvement in the world petroleum supply and demand balance appear to be fading. While U.S. crude oil production will grow with recovery from the hurricanes, only small increases in Organization of Petroleum Exporting Countries (OPEC) and other non-OPEC production and capacity are expected in the near future. Expected steady world oil demand growth, combined with only modest increases in world surplus oil production capacity and the continuing risks of geopolitical instability, are expected to keep crude oil prices high through 2007. The WTI crude oil price in EIA's most recent short-term forecast is projected to average \$68 per barrel in both 2006 and 2007. Retail regular gasoline prices are projected to average about \$2.57 per gallon in 2006 and 2007. Gasoline demand is projected to grow 0.9 percent in 2006 and 1.5 percent in 2007. The projected growth in demand reflects continued economic growth and the leveling off of motor gasoline prices.

During this year's summer driving season (April 1 to September 30) the national average retail price of regular gasoline is expected to be \$2.71 per gallon, 34 cents per gallon higher than last summer's average of \$2.37 per gallon. By September 2006, fuel prices are expected to be lower than last year. With another active hurricane season possible this year, news of any developing hurricanes and tropical storms with a potential to cause significant new outages could add to volatility in near-term prices. The projections outlined above do not reflect a scenario with significant new production or refinery outages.

This concludes my testimony, Mr. Chairman and members of the Committee. I will be happy to answer any questions you may have.

CHAIRMAN BARTON. We knew you wouldn't. Anyway, good effort. Thank you for your testimony. We now want to hear from Mr. William Wehrum with the EPA.

MR. WEHRUM. Thank you, Mr. Chairman, members of the committee. I appreciate the opportunity to speak with you today about fuel quality specifications and supply concerns. I am pleased to be here on behalf of my colleagues at EPA, some of whom are here right behind me, who have been instrumental in developing our Nation's strategy to reduce air pollution from motor vehicles and the fuels that run them. Today our focus is on existing Federal clean fuel programs and to provide EPA's perspective on State clean fuel programs, often called boutique fuels. Reports of fuel supply shortages have led to increased attention to the use of boutique fuels.

Just two weeks ago, President Bush called on EPA to confront the problem of too many localized fuel blends, yet there is much confusion over what a boutique fuel is. Quite simply, a boutique fuel is any unique fuel specification developed by a State or local air pollution agency and approved by EPA as part of a State plan to meet our national air quality standards. Currently, 12 States have approved boutique fuel programs;

eight States limit the volatility of gasoline during the summertime. Four other States control other parameters of fuels, such as aromatics and sulfur in gasoline or diesel.

These controls reduce evaporation of gasoline, which helps reduce smog in urban areas. We prepared a map showing the areas where these boutique fuels currently are required to be used. For some time there has been concern about potential adverse effects of boutique fuels on fuel pricing, supply, and distribution. Importantly, the cost of producing boutique fuels does not translate into retail consumer prices at the pump. As part of the President's 2001 National Energy Policy Report, EPA was directed to conduct a study to determine whether boutique fuels were contributing to fuel pricing and supply problems.

EPA worked with DOE to issue a report to the President, concluding that under normal conditions, the fuel production and distribution system works well and is able to provide adequate supplies of boutique fuels. However, because boutique fuels vary from conventional fuel, if production or distribution disruptions occur, such as hurricanes, pipeline breaks, or refinery fires, boutique fuel requirements can limit the availability of supply and therefore contribute to potential supply problems and short-term price spikes.

In response to the report's findings, EPA took several steps to ease the regulations governing the transition from winter to summer gasoline. For example, EPA revised its regulations to allow refiners to upgrade conventional gasoline to RFG, if it meets the RFG performance standards, thereby allowing for greater flexibility and providing RFG when supply is tight. Last year's Energy Policy Act also addressed the issue of boutique fuels. First, the Act established a fixed limit on the number of boutique fuels that EPA can approve. The list will limit further expansion of State clean fuel programs.

Second, the Act instructed EPA and DOE to perform a study on the effects of State boutique fuel programs on air quality, fuel blends, fuel availability, fungibility, and costs. EPA and DOE are currently coordinating efforts and will work closely in preparing this report for Congress. Third, the Act requires the agency to prepare another report by June 1<sup>st</sup>, 2008, concerning variations in regional, State, and local motor vehicle fuel requirements. The Act also required removal of the Federal oxygen content requirement for RFG. Removal of the RFG oxygen standard will allow refiners additional flexibility in how they make reformulated gasoline and when and where they blend oxygenates. EPA completed a rulemaking, as directed by Congress, on May 3<sup>rd</sup>, 2006, which took effect on May 8<sup>th</sup>.

Finally, the Act requires EPA to develop and implement a renewable fuel standard or RFS. This program will require increasing amounts of renewable fuels, such as ethanol and biodiesel to be blended into the Nation's fuel supply. While EPA's regulatory improvements in the new Energy Policy Act provisions have significantly improved key aspects of the boutique fuels issue, concerns about potential adverse effects of boutique fuels have persisted. Hurricane Katrina provided a stark demonstration that when the Nation's fuel supply is drastically reduced, multiple fuel regulations can complicate the recovery effort.

Moreover, persistently high crude oil prices and the resulting high gas prices have led to renewed effort to look for innovative ways to simplify the fuel distribution system. As a result, President Bush has directed Administrator Johnson to convene a Governors Boutique Fuels Task Force. All 50 Governors have been invited to participate. The task force will assess various State and local clean fuel requirements and the effect the requirements have on supply, quality, price and air quality.

Last Thursday, Administrator Johnson held a conference call initiating this process. Over the coming weeks we are inviting the input of outside experts from industry, public health organizations, and other interested parties. We also expect to hold a number of technical staff meetings to help EPA prepare a draft report for the task force's review in mid-June. The options in the report will be designed to help the President meet his overall goal of simplifying and unifying the fuel regulatory system and increasing cooperation among States on gasoline supply decisions.

The current fuel situation has had some unique influencing factors beyond the normal winter to summer gasoline transition practices. For example, the market underwent withdrawal of MTBE from RFG market areas. This MTBE-to-ethanol transition led to some additional tank management practices to prepare for the new products. Crude oil prices also hit historic highs. These factors, among others, provided for unusual market conditions. Despite these conditions, the market has managed the transition effectively and maintained the integrity of important environmental programs.

It is also important to note that although a number of States have banned the use of MTBE, there is no Federal ban. Refiners of RFG who have phased out the use of MTBE have done so through their own decisions. Of course, now that the RFG oxygenate requirement has been eliminated, refiners are free to produce RFG with or without an oxygenate.

Again, thank you, Mr. Chairman and members of the committee, for the opportunity to testify before the committee on these important issues. I would be pleased to answer any questions you may have.

[The prepared statement of William Wehrum follows:]

PREPARED STATEMENT OF WILLIAM WEHRUM, ACTING-ASSISTANT ADMINISTRATOR, OFFICE OF AIR AND RADIATION, U.S. ENVIRONMENTAL PROTECTION AGENCY

Mr. Chairman, and members of the Committee, I appreciate the opportunity to come before you today to testify on gasoline fuel quality specifications and supply. As the Acting Assistant Administrator for the Office of Air and Radiation, my responsibilities include overseeing all air-related activities of the Environmental Protection Agency (EPA or Agency). I am pleased to be here on behalf of my colleagues at EPA who have developed and worked closely with states to implement the highly successful programs that reduce harmful emissions from highway and off-road vehicles, engines and fuels.

My testimony will first provide an overview of existing federal regulatory clean fuel programs, followed by more discussion of state clean fuel quality programs, often referred to as "Boutique" Fuels.

#### **Overview of Clean Fuel Programs**

Fuel controls for emission reductions is often one of the most cost-effective methods to help reduce emissions. In the Clean Air Act Amendments of 1990, Congress directed EPA to develop and implement several important new clean fuel programs to improve air quality to reduce emissions that cause or contribute to the formation of ozone and air toxics. Many of these programs are national in scope, such as summertime controls on gasoline volatility and year round controls on gasoline sulfur. Congress set specific cities, performance standards and an oxygenate requirement for the reformulated gasoline (RFG) program which began in 1995. Provisions such as banking, averaging and credit trading have also been built into many of these regulatory programs and are designed to provide greater flexibility and reduce production costs.

Clean fuel programs have been an integral part of the nation's strategy to reduce air pollution and they have been successful. They provide significant, cost-effective and timely reductions in motor vehicle emissions.

#### **State Boutique Fuel Programs**

There is much confusion over what a boutique fuel is. The Clean Air Act (CAA) allows states to implement their own clean fuel programs. Ouite simply, a boutique fuel is a unique fuel specification that is developed by a state or local air pollution agency and approved by EPA as part of the State Implementation Plan (SIP) for the affected area. Most states that do not use RFG to address their air quality issues have elected to use gasoline with lower volatility than federal conventional gasoline standards. Sometimes states adopt these low Reid vapor pressure (RVP) fuels because the CAA does not allow them to join the federal RFG program. In other cases where states could have opted-in to the federal RFG program, local fuel providers worked with states to develop an alternative fuel specification that can be produced at a lower cost and still support their air quality needs. What this has typically meant in practice is the avoidance of the oxygen mandate in the RFG program because it is more expensive in some areas. It is worth noting that boutique fuels do not include other clean fuel requirements, such as Federal fuel controls (e.g., reformulated gas, winter oxygenated fuels), California clean fuel requirements, and area-specific fuels required by state law for purposes other than air quality (e.g., Minnesota's ethanol mandate).

Currently 12 states have approved boutique fuel programs. Eight states limit the volatility of gasoline and are in effect only during the summer months. Four other states control other parameters of fuels, such as aromatics and sulfur in gasoline or diesel fuel, or allow California's cleaner burning gasoline to be sold within their boundaries. [See attached map.] This reduces evaporation of gasoline which helps reduce smog in urban areas. [See attached chart of boutique fuel programs.] The state plans are required to estimate the additional cost. Those state estimates range from 0.3 to 3 cents per gallon

above the cost of conventional gasoline. It is important to note that the cost of producing boutique fuels does not translate into retail consumer prices at the pump. Since many economic factors influence the retail price of gasoline, I will defer to experts from the Energy Information Agency to describe the difficulty of translating fuel production costs to impacts on retail prices.

The Clean Air Act imposes strict limitations on EPA's approval of boutique fuels. Specifically, a State may prescribe and enforce a fuel quality control if, after review and approval of the SIP, the Administrator finds that the State control or prohibition is necessary to achieve the national primary or secondary ambient air quality standard and no other measures are available to bring about timely attainment. Where implemented, these fuels are an important and powerful tool for combating local air pollution problems.

#### **EPA's 2001 Evaluation of Boutique Fuels**

For sometime there has been concern about potential adverse effects of boutique fuels on fuel pricing, supply and distribution. As part of the President's 2001 National Energy Policy Report, EPA was directed to conduct a study to determine whether boutique fuels were contributing to such problems and if so to recommend solutions. EPA conducted an extensive review that included close cooperation with the Department of Energy (DOE) and extensive outreach to the fuels industry and other interested stakeholders. EPA issued a report to the President in October 2001. EPA's report focused on two primary issues. First, we assessed the possible need for greater flexibility in the process that fuel marketers used to make the transition from winter to summer grade gasoline. Second, we investigated the growing number of state and local boutique fuel programs and the challenges this growth presented to the gasoline distribution system.

The report concluded that during times of normal conditions, the fuel production and distribution system works well and is able to provide adequate supplies of boutique fuels to the required areas. However, because the specification of the fuel varies from the conventional fuel used in surrounding areas, if production or distribution disruptions occur, such as hurricanes, pipeline breaks or refinery fires, boutique fuel requirements can limit the availability of supply to the area and therefore contribute to potential supply problems and short term price spikes.

The Agency also evaluated the costs and benefits of several different approaches to limit the number of fuels available for adoption by states.

In response to the report's findings, EPA took several steps to ease the regulations governing the transition from winter to summer gasoline. For example, EPA increased the compliance testing tolerance from 1% to 2% for a limited transition time to allow for a smoother switch to summer-controlled gasoline. The Agency also revised the regulations to allow refiners to upgrade conventional gasoline to RFG, if it meets the RFG performance standards, thereby allowing for greater flexibility in providing additional RFG when supply is tight.

# **Boutique Fuel Provisions of the Energy Policy Act**

First, the Energy Policy Act of 2005 (EPAct) established a fixed limit on the number of boutique fuels that EPA can approve. The list will limit further expansion of the state clean fuel programs. EPA is preparing to publish this list for comment in a Federal Register notice which is expected before the end of this month.

EPA and DOE are also instructed by EPAct to perform a joint study on the effects of state boutique fuel programs on air quality, fuel blends, fuel availability, fungibility and costs, with a focus on making recommendations to Congress for legislative changes supporting developing a federal fuels system that maximizes fungibility and supply and addresses air quality requirements and reduces price volatility. The Agency and DOE are currently coordinating efforts and will work closely in preparing this report.

Further, EPAct requires the Agency to prepare another report by June 1, 2008, concerning variations in regional, state and local motor vehicle fuel requirements. Both reports will build off the EPA 2001 Boutique Fuels Report, accounting for recent and upcoming changes in the U.S. gasoline and diesel markets.

EPAct also authorized removal of the federal oxygen content requirement for RFG. Removal of the RFG oxygenate standard will allow refiners additional flexibility in how they make reformulated gasoline and when and where they blend oxygenates. EPA completed a rulemaking, as directed by Congress, on May 3, 2006 which took effect on May 8, 2006. California is treated differently under the Clean Air Act, this as directed by Congress. EPA removed the oxygen content requirement in California RFG in April, prior to its removal in other states.

Perhaps of greater importance, EPAct also requires EPA to develop and implement a renewable fuels standard, or RFS. This program will require increasing amounts of renewable fuels, such as ethanol and biodiesel, to be blended into the nation's gasoline supply. We currently are developing the program. A comprehensive proposal will be issued later this year.

# **Governors Task Force on Boutique Fuels**

While EPA's regulatory improvements and the new EPAct provisions have significantly improved key aspects of the boutique fuels issue, concerns about potential adverse effect of boutique fuels have persisted. Hurricane Katrina provided a stark demonstration that when the nation's fuel supply is drastically reduced as it was last year, multiple and differing fuel regulations can complicate the recovery effort. Moreover, persistently high crude oil prices and the resulting high gas prices have caused a renewed effort to look for innovative ways to simplify the fuel distribution system.

Consequently, on April 25th, President Bush directed Administrator Johnson to convene a Governors Boutique Fuels Task Force. All 50 Governors have been invited to participate. The task force will look to assess various state and local clean fuel requirements and the effect the requirements have on supply, quality, price, and air quality.

Last Thursday, Administrator Johnson held a conference call initiating this process. Weekly meetings will be held, with our next meeting scheduled with the task force May 12, where EPA staff will present background information on fuel regulations, the different boutique fuels in use in this country, the results of a 2001 review which the Agency conducted on boutique fuels and other related information. Over the coming weeks we are inviting the input of outside experts from industry, public health organizations, and other interested parties. We also expect to hold a number of technical staff meetings to help EPA prepare a draft report for the task force's review in mid-June. This ambitious schedule will put us on track to provide the President with our final report within 8 weeks. The key elements of the report should include, a summary of the process we utilized to review boutique fuels; information on actions that have already been undertaken, including EPA's 2001 boutique fuel report and provisions required by the Energy Act; our current understanding of the use and utility of boutique fuels; stakeholder opinion and feedback; and options, recommendations and additional information needs.

The options in the report will be designed to help the President meet his overall goal of simplifying and unifying the fuel regulation system and increasing cooperation among states on gasoline supply decisions.

#### Conclusion

In closing, this year's gasoline situation has had some unique influencing factors beyond the normal winter-to-summer gasoline transition practices. For example, the market underwent withdrawal of MTBE from RFG market areas, and the addition of ethanol into those RFG areas that had previously used MTBE. This MTBE-to-ethanol transition lead to some additional tank management practices to prepare for the new products. Crude oil prices also hit historic highs. These factors, among others, provided for unusual market conditions. Despite these conditions, the market has managed the transition effectively and maintained the integrity and benefits of important environmental programs.

It is important to note that although a number of states have banned the use of MTBE, there is no federal ban. Refiners of RFG who have phased out the use of MTBE have done so through their own decisions. Of course, now that the RFG oxygenate requirement has been eliminated, refiners are free to produce RFG with or without an oxygenate.

Again, I want to thank you, Mr. Chairman and the members of the Committee for the opportunity to testify before the Committee on these important issues. This concludes my prepared statement. I would be pleased to answer any questions that you may have.

# BOUTIQUE FUEL PROGRAMS INCLUDED IN STATE [CLEAN AIR] IMPLEMENTATION PLANS (SIPs)

Type of Fuel Control*	PADD**	Area/State
RVP*** of 7.0 psi	2	Kansas City, MO (3 counties)
RVP of 7.0 psi	2	Kansas City, KS (2 counties)
RVP of 7.0 psi	3	El Paso, TX (El Paso county)
RVP of 7.0; extended summer season from June 1 to September 30	5	Phoenix, AZ (Maricopa County)
RVP of 7.0 psi; includes a provision addressing sulfur content	1	Atlanta, GA (45 county area)
RVP of 7.0 psi	3	Birmingham, AL (2 counties)
RVP of 7.2 psi	2	E. St. Louis, IL (3 counties near St. Louis, MO)
RVP of 7.8 psi	1	Pittsburgh, PA (7 county area)
RVP of 7.8 psi	2	Clark & Floyd, IN (2 counties near Louisville, KY)
RVP of 7.8 psi	2	Detroit, MI (7 counties)
RVP of 7.8 psi; extended summer season from May 1 to September 15	1	Southern, ME (7 county area)
RVP of 7.8; extended summer season from May 1 to October 1	3	Central & Eastern, TX (95-county area)
Low emission diesel fuel with maximum 10% volume aromatic hydrocarbon content and minimum cetane of 48 required. (Allows substitute Plans w/equivalent NOx reductions)	3	Houston & Dallas, TX
Cleaner Burning Gasoline; similar to Federal RFG or California RFG in summer; in winter similar only to California RFG.	5	Phoenix, AZ (Maricopa County)
Winter gasoline controls on aromatic hydrocarbons and sulfur.	5	Las Vegas, NV

May 4, 2006

Unless otherwise specified, RVP control is in effect June 1 to September 15.

 PADD: Petroleum Administration for Defense Districts.

\*\*\*RVP: Reid Vapor Pressure is a measure of gasoline's evaporation rate. Higher RVP gasoline evaporates more easily at summer temperatures.

State Boutique Fuel Programs - May 2006

# ND мт ID SD OR WY NE UT МО OK ☐ PADD 1: East Coast ■RVP of 7.0psi Low Emission Diesel Fuel ☐ PADD 2: Midwest & RVP of 7.8psi ■RVP of 7.0psi w/Sulfur Content □ PADD 3: Gulf Coast ■Cleaner Burning Gasoline □RVP of 7.2psi PADD 4: Rockies

CHAIRMAN BARTON. Thank you, sir. The Chair recognizes himself for the first 5 minutes of questions. The first question to you, Dr. Gruenspecht. I have seen different numbers about what U.S. domestic refinery capacity actually is. I have seen a number as low as 15 million barrels per day and I have seen a number as high as about 17-1/2 million barrels per day. According to the EIA, what is U.S. domestic refinery capacity right now?

■Winter Gasoline

Our current number is about 17.3 million MR. GRUENSPECHT. barrels.

CHAIRMAN BARTON. Push that button there.

RVP of 7.8psi

PADD 5: West Coast

Our number is 17.3 million barrels of Mr. Gruenspecht. distillation capacity. As you well know, there are all different types of units at refineries, but typically, you measure at the distillation level.

CHAIRMAN BARTON. So the official number is 17.3?

MR. GRUENSPECHT. That is our current number.

CHAIRMAN BARTON. All right. What is the demand for refined products per day in the United States? We have got capacity for 17.3. What is our demand for the products that the refineries produce?

MR. GRUENSPECHT. That is a good one. I am trying to think through that because our total petroleum demand is, you know, about 20-1/2 million barrels a day, but that includes some of the liquid petroleum gasses and other things that don't come through the refinery. My colleague here tells me 18.5 would be a good number, 18.5 million barrels.

CHAIRMAN BARTON. Why wouldn't it be 20 or 21?

MR. GRUENSPECHT. Because again, petroleum includes things like some propane and other liquid petroleum gasses, some of which come out of natural gas production facilities and never go into a refinery.

CHAIRMAN BARTON. Well, what I am trying to get at, one of your statements was the crack spread, which I am going to give you an opportunity to define, because that is not what most Americans think it is.

MR. GRUENSPECHT. Okay.

CHAIRMAN BARTON. But before we get there, I want to determine what the refinery production demand spread is and according to you or EIA, it would seem to be about a million and a half barrels per day, as opposed to three or four million barrels per day.

MR. GRUENSPECHT. We import some products, if that is what you are trying to say, what we have to import in the way of petroleum products. We import, I think, about 10 percent of our gasoline, which is close to a million barrels a day of gasoline. I think we are also maybe importing some small amounts of distillate heating fuel and diesel.

CHAIRMAN BARTON. And would it be fair to say if we could increase domestic refinery capacity by two million barrels per day, we would be self-sufficient in refined product capacity in this country?

MR. GRUENSPECHT. Two million barrels per day of capacity, again, assuming the utilization maintained at the current level, I think would allow us to refine the products that we consume. But again, we would not then be taking advantage of some of the things, like in Europe, the shift over to diesel cars, which has given them more gasoline.

CHAIRMAN BARTON. Than it is as a--

MR. GRUENSPECHT. Yes, if you wanted to do that.

CHAIRMAN BARTON. If you were me and you were setting a goal to be self-sufficient in refinery capacity for our domestic demand in this country, the goal would be an increase of around two million barrels per day?

MR. GRUENSPECHT. That sounds about right to me.

CHAIRMAN BARTON. Okay. Now, let us go to the crack spread.

MR. GRUENSPECHT. Okay.

CHAIRMAN BARTON. Would you explain in layman's terms what that is when you relate it to refinery?

MR. GRUENSPECHT. If you take the value of a barrel of gasoline on the wholesale market and compare that to the value of a barrel of crude oil on the wholesale market, the spread between those two prices is the crack spread. CHAIRMAN BARTON. And what has it been historically? What would be considered an adequate spread to make a reasonable profit? I know the answer, at least I think I do.

MR. GRUENSPECHT. Well, it varies by time of year, first of all, but I think for this time of year, a 20 cent per gallon gasoline crack spread would be considered right.

CHAIRMAN BARTON. Convert that to barrels.

MR. GRUENSPECHT. Times 42 would be \$9.

CHAIRMAN BARTON. \$8 or \$9.

MR. GRUENSPECHT. \$8 or \$9.

CHAIRMAN BARTON. What is it now?

MR. GRUENSPECHT. Significantly higher than that.

CHAIRMAN BARTON. How much significantly higher?

MR. GRUENSPECHT. It is probably a good \$8 or \$9 higher than that.

CHAIRMAN BARTON. All right.

MR. GRUENSPECHT. I mean, \$10 higher than that, perhaps.

CHAIRMAN BARTON. Wouldn't it be even higher than that?

MR. GRUENSPECHT. Well, I haven't looked today, but--

CHAIRMAN BARTON. Well, look. Have your staff look today. If I were to tell you that it was around \$30 a barrel, what would you say?

MR. GRUENSPECHT. \$30 a barrel, I think, would be a little high.

CHAIRMAN BARTON. Well, find out.

MR. GRUENSPECHT. Probably \$18; 45 times 42 is \$20, maybe \$21 a barrel.

CHAIRMAN BARTON. There is no question then.

MR. GRUENSPECHT. It is a lot higher than--

CHAIRMAN BARTON. If you have a refinery that is operating today, you are doing okay.

MR. GRUENSPECHT. You are making good money. Doing very well.

CHAIRMAN BARTON. You are paying the rent with a little extra for contingencies.

MR. GRUENSPECHT. And indeed, you know, as I indicated in my testimony, the financial incentives for expanding--

CHAIRMAN BARTON. My time has expired, but my last question, is there any other part of the distribution chain today, in the American domestic market, that has a spread as large as the crack spread at the refinery output level?

MR. GRUENSPECHT. Not to my knowledge.

CHAIRMAN BARTON. Not at the crude oil.

MR. GRUENSPECHT. No.

CHAIRMAN BARTON. Not at the retail.

MR. GRUENSPECHT. You are talking about the distribution margin.

CHAIRMAN BARTON. So when we look at the--

MR. GRUENSPECHT. The people who own gas stations are not making that kind of margin. If you are looking at the distribution margin, no, they are not.

CHAIRMAN BARTON. My time has expired. I recognize Mr. Boucher.

MR. BOUCHER. Well, thank you very much, Mr. Chairman, and thank you in particular for that interesting set of questions. I intend to pursue some of the answers to those questions, as well. Before I do that, though, Mr. Gruenspecht, let me direct your attention to another matter and one that also might serve our country usefully in order to reduce the price at the pump for gasoline, and that is the potential to have coal to liquid fuels. Mr. Shimkus and I both have a very strong interest in utilizing to a far greater extent our Nation's plentiful reserves of coal.

We are beginning to see ways that that is happening already in the generation of electricity with new technologies for coal gasification. But my understanding is that a great opportunity also exists to utilize coal to manufacture a liquid fuel that can displace petroleum and be used directly to power transportation. Can you tell us, is such a technology, given the price of oil in the United States today, would it be economic? Can such a technology be employed in an economically feasible way given today's petroleum prices?

MR. GRUENSPECHT. Yes, I can. We do a long-term outlook, as you know, and this year we have raised substantially our oil price projections and in this year's long-term outlook for the first time we have coal-to-liquids coming in, so coal-to-liquids, we believe, at the reference case oil price path that we envision, would be economically competitive. There are many issues involved with siting the plants.

MR. BOUCHER. That is all understood, but at what price per barrel of oil do coal-to-liquid fuels become price competitive?

MR. GRUENSPECHT. I believe that investors would want to know that prices would be \$40 per barrel or higher for a sustained period of time.

MR. BOUCHER. And do you see prices being at \$40 per barrel or higher here for a sustained period of time?

MR. GRUENSPECHT. Our long-term reference projection is for prices at that level or higher.

MR. BOUCHER. And so given that economic reality, what interests are the companies that have expertise in converting coal to liquid fuel is now showing in developing that technology in the United States, that has a long experience in South Africa with that technology and with that market, might be a case in point.

MR. GRUENSPECHT. I have not been following the individual companies closely, but I do know that some projects are under

consideration. I know there is a project in Wyoming that is under consideration. I know there are some projects, I believe, in Pennsylvania that are under consideration.

MR. BOUCHER. And the private sector is showing some genuine interest in this?

MR. GRUENSPECHT. I think there is some interest.

MR. BOUCHER. I would like to invite your attention to specific company activity and if you could become apprised of that and report to us, that would be extremely helpful. Let me move to another subject. Can you tell us today how much the political risk for instability in Iran contributes to the price of petroleum?

MR. GRUENSPECHT. As you probably heard at the hearing last week, there are really a whole set of factors that are driving oil prices. Geopolitical risk is one of them. Iran is one of those geopolitical risks.

MR. BOUCHER. I am asking you to quantify that to some extent. Can you do that?

MR. GRUENSPECHT. I am really not able to separate out Iran from the--

MR. BOUCHER. Can you quantify the general geopolitical risk?

MR. GRUENSPECHT. Again, there is also the issue of low surplus capacity to produce oil, so at other times when there has been more surplus capacity, geopolitical risk would be less of a concern, so again, it is hard to separate out.

MR. BOUCHER. Well, give me the circumstance we confront today. Given the capacity that is available today, given the price of petroleum that we have today, can you give us a range of the percent of that price that is attributable to political risk generally?

MR. GRUENSPECHT. I would actually have a hard time doing that.

MR. BOUCHER. All right, let me move to another question.

MR. GRUENSPECHT. Um-hum.

MR. BOUCHER. We have already heard, in response to your answers to Chairman Barton, that we are importing today about 2 million barrels of refined product, gasoline coming into the U.S. to meet our 20 million barrel per day demand. Is that number correct? If not, please give us the correct number.

MR. GRUENSPECHT. I think we are probably importing a little bit less than two million barrels of refined product--between one and two is the right number.

MR. BOUCHER. All right, between one and two. Is there a difference in price for imported product as compared to domestically produced product and if so, what is that number?

MR. GRUENSPECHT. There does need to be an arbitrage spread between the U.S. market and the European market to bring product in, but the U.S. market clears that at one price.

MR. BOUCHER. Well, so you are saying the refined product that comes in from abroad comes in at the American domestic price, is that correct?

MR. GRUENSPECHT. I am saying if we need refined product from abroad to meet our demand, then the U.S. market price is going to be equal to the price that we pay for that overseas plus the cost of transportation.

MR. BOUCHER. If there is really no difference in price, then why would an outage of American refining capacity result as it did last August in a dramatic one-up in gasoline prices?

MR. GRUENSPECHT. Well, first of all, there is a time lag in the process. In fact, last fall, as I recall, tremendous amounts of imports did come in from Europe and that was one of the reasons why prices fell dramatically following Hurricanes Katrina and Rita after they initially rose. So I do think that in some places the world market does help us, but needing to go out to the world market does mean that, you know, we need to have prices high enough to attract those imports of product.

MR. BOUCHER. My presumption here is that there is a difference in price between the refined product imported from overseas and the refined product created domestically here, if for no other reason, then because of transportation. Any information that you have concerning that difference in price would be extremely helpful to us. And Mr. Chairman, I detect that my time has expired and I thank you for your indulgence.

MR. SHIMKUS. [Presiding] It is always educational to listen to my colleague, Mr. Boucher's, questions and I do appreciate them. But he didn't allow you to answer one of the dilemmas on coal-to-liquid, which is the siting of a refinery and the cost to do that, Dr. Gruenspecht, and as we debated on the floor last week, that was part of that debate. I mean, the capital investment for coal-to-liquid, you are correct. It is about \$40 a barrel. Someone says \$35 to \$45. The projection of the return over the advertised amount over whatever the return would be 10 to 20 years plus the capital risk, that is why the refinery bill is so important, because there is a coal-to-liquid refinery provision as part of the overall refinery debate and I guess we will get a chance to debate that again.

And I understand your inability to quantify risk because that is what the futures market does. I mean, that is where the futures markets really, they are the ones that are taking capital in a transparent process and trying to make an assumption of what the risk is and that is not in your arena, nor are you risking your own capital to do that. But let me go to in your testimony in the debate and discussion on transition from MTBE

to ethanol and you specifically mentioned a very tight ethanol market limited by short-run ethanol production capacity. Can you elaborate on this statement specifically where we are now in terms of supply and what the market is demanding?

MR. GRUENSPECHT. Okay, let me try to do that. In 2005 the demand for ethanol ran about 263,000 barrels a day. Replacing MTBE in the reformulated gasoline that it was used in would require about 130,000 barrels a day of ethanol. So if, and this is an important if, if you kept all the ethanol that was used in 2005 where it was used in 2005, and tried to use that 130,000 barrels a day, you would need about 390,000 barrels a day. That is not what has happened. In February, ethanol supply was up around 302,000 barrels a day.

What is being done is ethanol is being moved out of conventional gasoline blends in the Midwest, so called E10 or gasohol, I think was the old term, and some of that ethanol is being taken and moved to the reformulated gasoline areas. So in fact, the ethanol is getting to where it is needed to substitute for MTBE, but the amount of ethanol being used in conventional areas is being reduced. So again, like all these questions, the answer ends up being somewhat more complicated.

MR. SHIMKUS. What kind of capacity increases are we looking at within the next six months? I mean, there is a lot of planned facilities, built and on line, so what is your projection?

MR. GRUENSPECHT. I had thought we were at a number like 50,000 barrels a day over the next six months, I think, is in the ball park and I think there is even more coming on line by the beginning of 2007, so yes, I think there were 33 plants under construction as of the beginning of this year.

MR. SHIMKUS. I think that number is close. Let us talk about the imports, then. That is going to be a debatable issue, so what about, how much are we importing today?

MR. GRUENSPECHT. I think we had, I always go barrels and gallons. I think we imported something like 80 million gallons so far this year from the Caribbean basin countries. I think altogether, putting it on the same terms I have been talking to before, from the Caribbean and from Brazil, it is about 22,000 barrels a day.

MR. SHIMKUS. And what do you think this will increase to based upon demand and the changing markets?

MR. GRUENSPECHT. My understanding is that the world ethanol market is pretty tight this year and while there could be some increases, we are not expecting very large increases.

CHAIRMAN BARTON. Would the gentleman yield?

MR. SHIMKUS. If I have to.

CHAIRMAN BARTON. Well, you don't have to.

MR. SHIMKUS. Yes, I will.

CHAIRMAN BARTON. What would the impact be if we suspended the tariff on imported ethanol temporarily, say, for 12 months or 24 months? What would that impact be on amounts imported and the domestic price of ethanol?

MR. GRUENSPECHT. When the market is in balance, the domestic price of ethanol, if you look, is pretty much the price of gasoline plus the value of the tax credit. That is what the price of ethanol has been running when the market is in balance. That is what the price of ethanol is right now. That makes sense because in the Midwest areas of conventional gasoline, someone is deciding whether to mix ethanol in or not, and what they are going to look at is can I make my fuel cheaper by adding this or not adding this? My guess would be that in the short run, you might get some more ethanol imports, but it is not a tremendous quantity, maybe 10,000 barrels a day, 20,000 barrels a day more, and what you would find is that ethanol would go back in to the Midwest gasoline that it has been taken out of to use in reformulated gasoline blending and that the price probably wouldn't change all that much.

MR. SHIMKUS. And I would concur with that analysis.

MR. GRUENSPECHT. Well, you know, sometimes what we have to say is good news for people and sometimes it is not. In the longer run suspending the tariff could make a bigger difference.

MR. SHIMKUS. The tariff is not impacting the ability of people who want to import ethanol into this country to do that. The demand is there.

MR. GRUENSPECHT. I am an economist but I wouldn't go that far. I think right now the market is pretty tight and the potential for the quantity to go up I think is limited in the short run. I think the price is driven by this blending of conventional gasoline in the Midwest and the price wouldn't change much. I think over time it could make a significant difference.

MR. SHIMKUS. Let me follow up on this line of questioning, as far as the transportation issue and the transportation and the blending infrastructure. What is your projection as far as the time needed to switch in these two arenas to ensure that ethanol is getting where it needs to get to? Or is there a problem?

MR. GRUENSPECHT. My sense is that there have been some problems. In our February paper, we talked about the lower East Coast and Texas as being the two places likely to have problems. Those I think turned out to be the case and I think Texas is still having some difficulty.

MR. SHIMKUS. Currently, how is ethanol being transported?

MR. GRUENSPECHT. I think by railcar, barge, and some tanker truck, where you have real bottlenecks.

MR. SHIMKUS. So you don't believe that some of the alternative to pipelines is not meeting up with the demand?

MR. GRUENSPECHT. I think there have been some transitional issues. I think most of the transition is behind us. There are still some stumbling blocks. It still needs to be watched closely.

MR. SHIMKUS. Let me quickly, I still have a minute left, go to Mr. Wehrum from the EPA. As I understand your written testimony, on page two, EPA does not view alternative fuels that may be required as part of an energy strategy, such as ethanol or biodiesel, to be boutique fuel. Is that correct?

MR. WEHRUM. Mr. Chairman, we define a boutique, or at least we use that term in EPA, to mean a particular kind of fuel and it is one that is adopted by a State or a local area for purposes of improving air quality, and that is approved into the State Implementation Plan for which we require States to have to show how they are going to meet our air quality standards.

MR. SHIMKUS. Through the SIP call, through the State Implementation Plan.

MR. WEHRUM. That is correct. A boutique, as we define it, is a fuel that is approved as a control measure in the State Implementation Plan.

MR. SHIMKUS. If a State or locality has a requirement in place related to ethanol and biodiesel and that requirement has positive benefits for reducing air pollution in the Clean Air Act nonattainment areas like St. Louis or Chicago, I assume the EPA would consider the benefits of those fuels in evaluating the SIP plan, is that correct?

MR. WEHRUM. Well, I would answer that question in two ways. In nonattainment areas, those that don't meet our air quality standards, measures that are adopted into the implementation plan are the measures that are considered for purposes of judging whether the plan is sufficient to bring the area into compliance. So if an ethanol-blended fuel, for instance, were not a part of the SIP, then it would not be considered in that way. Having said that, if an ethanol blend is being used, whatever effect it is having on air quality would be manifested in the values that are measured by the monitors in the area and would be reflected in that way.

MR. SHIMKUS. Yes, and I will end on this. Like biodiesel, the 20/80 mix, it is a 50 percent reduction in emittants and so we talk about renewable fuels, we talk about ethanol, but really biodiesel is another great renewable fuel that has some positive benefits. Let me now turn to my colleague from California, Ms. Eshoo, for 8 minutes.

MS. ESHOO. Thank you, Mr. Chairman. It is nice to see you in the Chairman's chair.

MR. SHIMKUS. Thanks. It is good to be here.

Ms. Eshoo. Yes. Welcome to the witnesses. This is a very important hearing and I appreciate the fact that the Chairman of our committee has begun the examination and we need to have a very good one, not only to examine the issues, but to understand them better, because there are many complexities. So I am going to try to get into some of the complexities. One of the issues that many constituents have raised with me, and I can't help but notice we go driving through the areas at home and you see the gas stations. They are really only a handful of companies and I can't help but think that there is fierce competition in my district in terms of high technology, but I don't see the kind of competition amongst the oil companies. In your examination of things over at the EIA, have you examined the whole issue of competition or the lack thereof, and the impact that that has overall, or do you not examine that?

MR. GRUENSPECHT. That is generally not within our purview. The Federal Trade Commission, Department of Justice, I know the President has--

Ms. Eshoo. No, I am not talking about potential violations of antitrust.

MR. GRUENSPECHT. Yes.

Ms. Eshoo. In fact, I don't really think that matters.

MR. GRUENSPECHT. Okay.

Ms. Eshoo. I don't think they have to collude. I think that there are so few and that there has been such a consolidation in the industry, that, amongst a few, if one is going to raise the price, they know their brother friend across the street that represents that oil company are going to raise their prices too, but since that is not something under your purview, maybe it will be with people that come in to testify. But I think it is something that the committee should examine, because I do think that it is part of this overall challenge that we are facing.

I would like to read something in to the record and I will obviously be calling it to your attention at the same time. One of the issues, and it has come up today and it is a legitimate one to examine, is the whole issue of capacity at our U.S. refineries. This is a Reuters article that was published January 25 of this year, and I am just going to, if I can, Mr. Chairman, submit the entire article for the record, but I would like to read part of it to you, "An ExxonMobil Corporation official told congressional aides this week" now remember, this was dated January 25 "that flat North American demand for gasoline forecast through 2030 means there is no need to build new U.S. refineries, a congressional source told Reuters on Wednesday. Scott Melman, manager of Exxon's economics and energy division, on Tuesday briefed aides with the U.S. House Energy and Commerce Committee" and I understand it was

bipartisan staff "on the company's oil demand outlook. According to a committee staff member who attended. 'Exxon said they don't want to build any new refineries in North America because of flat demand for petroleum products by 2030,' the staff member said, speaking on a condition of anonymity."

So would you comment on this? I mean, because this is something that is constantly brought up in the debate in the Congress when we talk about energy, that we need to drill our way to energy independence, that we have environmental laws that obstruct refineries from being built in the country, which have an effect on our overall energy scene. Would you comment on this?

MR. GRUENSPECHT. Sure. Our view is that there will be growth in demand for refined products in the United States, in the long run. It is also our understanding that there is a significant interest in the industry in adding to refinery capacity, if not necessarily building entirely new greenfield refineries. And I mentioned earlier in my testimony that there is by our count, at least one and a half million barrels per day of announced projects, and that is not to 2030, that is between now and 2009, 2010.

CHAIRMAN BARTON. Well, would the gentlelady yield?

Ms. Eshoo. I would be glad to, Mr. Chairman.

CHAIRMAN BARTON. What is the demand projection increase? Can you give us specific numbers and within a timeline?

MR. GRUENSPECHT. Sure. We have petroleum demand growing to about 26 million barrels a day by 2030.

CHAIRMAN BARTON. From the current 20?

MR. GRUENSPECHT. From the current 20.

CHAIRMAN BARTON. Is it a straight-line increase of 1 to 2 percent a year, approximately?

MR. GRUENSPECHT. I would have to look that up and check for the record.

CHAIRMAN BARTON. Well, that is important.

MR. GRUENSPECHT. Absolutely.

CHAIRMAN BARTON. Because if Exxon is saying, in the year 2030 which is 24 years from now, demand will finally flatten out, that may be true.

MR. GRUENSPECHT. Right.

CHAIRMAN BARTON. Historically in the United States demand has gone up at least 1 percent and in some years as high as 3 percent, we are going to be using a lot more refined products in this country in 2030.

MR. GRUENSPECHT. Right.

CHAIRMAN BARTON. I thank the gentlelady for yielding.

MR. GRUENSPECHT. Yes.

Ms. Eshoo. Glad to, Mr. Chairman. In this article, a spokesman for ExxonMobil, Mark Budrow, said that the fact that the company is not seeking to build new refineries is "very consistent with what we have been saying for quite some time. We think the most cost-efficient and effective way, the fastest way to add capacity in the United States is to refine our own refineries," Budrow said. Do you know what refine our own refineries means? Refine our own refineries. I mean, is that--

MR. GRUENSPECHT. I take it that means improve and round out the refineries. And again, companies do differ among themselves. I mean, you have some companies that are very aggressive in refining--

Ms. Eshoo. Mr. Chairman, on this point of the whole issue of refineries, capacity in our country, we really should have representatives from the oil companies here to answer these questions. I mean, there are only a handful of them, but it is--

CHAIRMAN BARTON. They will be here tomorrow.

Ms. Eshoo. But I think the institute is going to be, a trade association is going to be here.

CHAIRMAN BARTON. We have got API and both big national groups are having their Washington head of their office here tomorrow.

Ms. Eshoo. The CEOs will be here?

CHAIRMAN BARTON. Well, I haven't said that yet.

MS. ESHOO. Well, that is what I am suggesting.

CHAIRMAN BARTON. But I mean Red Cavaney and Bob Slaughter, who both head the National Refiners Institute and the American Petroleum Institute, will be here tomorrow sitting right where those two gentlemen are.

Ms. Eshoo. Are those trade associations?

CHAIRMAN BARTON. Yes.

Ms. Eshoo. All right. To Mr.--is it Wehrum?

MR. WEHRUM. That is correct.

Ms. Eshoo. On the whole issue of boutique fuels, we had a very, very good debate and discussion when we were drawing up legislation here at the committee. That was passed. Can you tell us, as representing the EPA, how that is working today, how effective our legislation was, relative to boutique fuels?

MR. WEHRUM. Congresswoman, you are referring to the Energy Policy Act of 2005?

Ms. Eshoo. Right. Yes.

MR. WEHRUM. We are aggressively implementing several aspects of the Energy Policy Act that are relevant to the fuels program. I think first and foremost the renewable fuel standard, EPAct as we call it, Energy Policy Act, required EPA to develop and implement a program that would require specified amounts of renewable fuels to be blended in to the gasoline supply on an annual basis, beginning with the year 2006.

Ms. Eshoo. Yes.

MR. WEHRUM. We have adopted a rule, just for the year 2006, which we believe assures compliance with the mandate and right now are moving quickly to adopt or propose to publish a proposed regulation and as soon as we can after that promulgate that action that will set out the comprehensive program that would be effective from 2006 and beyond.

MS. ESHOO. So we are still in the process of developing how it is going to be administered?

MR. WEHRUM. As I said, Congresswoman, we moved in a step-wise fashion and--

Ms. Eshoo. I want to understand where it is.

MR. WEHRUM. Certainly. And the first step that we took was to adopt a rule that applied specifically for calendar year 2006. The mandate began to apply in--

Ms. Eshoo. Yes.

MR. WEHRUM. --calendar year 2006, and that rule was published and is effective and establishes a nationwide compliance mechanism for-

Ms. Eshoo. Is this on boutique fuels, though, the question that I asked?

MR. WEHRUM. This is the renewable fuels standard.

Ms. Eshoo. No, on boutique fuels.

MR. WEHRUM. It is not specific to boutiques, but it is--

Ms. Eshoo. But that was my question.

MR. WEHRUM. Okay.

Ms. Eshoo. That was my question. So if you could address my question?

MR. WEHRUM. Sure.

Ms. Eshoo. I appreciate the other information, but I would like to know about boutique fuels, because it is an area that has been raised in terms of cost.

MR. WEHRUM. Sure.

MS. ESHOO. And we are talking about gasoline prices, so I would like to know where the Administration is with this.

MR. WEHRUM. Sure. The provision most specific to boutique fuels in the Energy Policy Act of 2005 was a requirement for EPA to develop and publish a list of the boutique fuels that currently exist in the various State and local programs, and the effect of that listing would be to limit the number of boutiques that could be approved after that point.

Ms. Eshoo. Actually, you were supposed to come up with that list nine days after the legislation was enacting. It is now May of 2006. This

is a long time ago. So, Mr. Chairman, I see that I have gone over my time.

MR. HALL. [Presiding] We used some of your time, though. I will allow you another 30 seconds.

Ms. Eshoo. Well, I think that I am just as frustrated as my constituents. It is very difficult, I think, for anyone that is listening to this hearing today to extract from it why we are where we are in our country. I mean, just a very simple question about boutique fuels which is going to come up in the debate, and there may even be legislative directives about this, we addressed here some time ago, and for me to hear that the EPA is working on coming up with a list, really falls far short. So it really is not encouraging. And so I am just going to stop and thank you, Mr. Chairman, for holding the hearing. We have got a lot of work to do.

MR. HALL. I thank you. The Chair recognizes the gentlelady from California, Mrs. Bono.

Ms. Bono. Thank you, Mr. Hall. Dr. Gruenspecht, could you help me understand a little bit about the way in which domestic oils come to market? A mom and pop well gets their oil out. Then what happens? Who is the person that comes to the mom and pop wellhead and picks up that oil? What is that person called? What is that company called? They come and they bring their truck. It is not a wholesaler, is it just a transportation company? Is that all they are, generally speaking?

MR. GRUENSPECHT. I would assume it is something like that.

Ms. Bono. So for example, Marathon Oil. So does the mom and pop domestic producer, is there competition with who might come? Can they sell their oil to multiple buyers, or is there some that it is almost a monopoly, they can only sell, generally speaking, to one company? And the reason I ask this is I don't quite understand the domestic producer, the spread in which they are paid has changed dramatically.

MR. GRUENSPECHT. In some cases that does apply. Sometimes that has to do with demand for a particular grade of oil. If a particular refinery that uses a particular grade of oil, say, is down for maintenance, it can affect what a particular producer can get for that oil.

Ms. Bono. But you know, then you would think it would be a spike or a certain thing. In my opening statement, I mentioned giving incentives to independent producers. Right now the rising spread between West Texas intermediate and other domestic oil is different. In Illinois, it is about \$8. In Wyoming, it can get to \$25 to \$20. So I am trying to figure out what justifies that spread, and the spread has changed. It hasn't been spiking. The spread has changed continuously up and the domestic producers are saying it is hard to get sympathy right now in this business, but they are saying they are finally making money,

they are able to reinvest that money in aging equipment, that they couldn't do--

MR. GRUENSPECHT. Right.

Ms. Bono. --when the price of oil was too low. So now they are reinvesting the profits they are having, but the spread keeps changing and the domestic producer is seeing less and less, compared to what the Chairman was saying about the refineries, and clearly the transportation people, or whatever they are called--

MR. GRUENSPECHT. Right.

MS. BONO. -- are taking it from the wellhead to the refineries.

MR. GRUENSPECHT. Again, I am not sure it is necessarily the transportation issue. I mean, the same thing is observed on the market, the spread between light oil and heavy oil, say, which is maybe a different spread than the one you are talking about. That had been as narrow as \$2 to \$3 a barrel and now it is up to very high levels. The spread has opened up because the higher quality, most in demand oils that produce the most light products, given the type of refining capacity, their value has skyrocketed relative to the heavier oils, less desirable oils that are more difficult to process. This is not just something domestically; this is something in the worldwide market.

MS. BONO. But the gravity of the west Texas oil might be better than, say, Illinois crude.

MR. GRUENSPECHT. Right.

Ms. Bono. Yet Illinois has less sulfur, and that has not changed. That was the same way before--

MR. GRUENSPECHT. No.

Ms. Bono. --this market, so why now is the spread--and I think this-like the Chairman's finding, money from the refineries and the spread has gone irrationally high and the same thing here, it is money. It is again added into the price to the consumer, that people don't even realize it is happening and I think somebody ought to look at these spreads, that the domestic producers--it is not their fault. Oftentimes, they are seeing lower and lower profits. I mean, yes, they are increasing, but compared to everybody else in the supply chain.

MR. GRUENSPECHT. Well, this is something we have been asked to look into in the past and we do look into. But again, we find that there really is an extra high premium on the very high quality oil right now, and that is maybe part of what these producers are seeing. Again, we will look into it for you.

Ms. Bono. I would appreciate that very much, and if you could respond in writing, that would be very helpful to me. Thank you and I yield back my time, Mr. Chairman.

MR. HALL. I thank the gentlelady. The chair recognizes the gentleman from California, Mr. Waxman, for 5 minutes.

MR. WAXMAN. Thank you, Mr. Chairman. Mr. Wehrum, in your written testimony, you and Mr. Gruenspecht both discussed how States and localities benefit from adopting area-specific clean fuel blends. As you both noted, these cleaner fuels improve air quality and are often far less costly than other pollution control options, including opting into Federal reformulated gas requirements. Yet Section 1541 of the energy bill passed last August sharply limits States' ability to adopt clean fuels requirements. It does this in two ways. First it freezes the total number of unique State fuels. This will prevent States from requiring any new clean fuel blend unless an existing blend is dropped. Second, the energy law bars States from requiring even an existing clean fuel blend to be used in new areas of the country. The only exception is for one specified low volatility fuel type. Do you agree that together these existing provisions will substantially limit any additional State clean fuel requirements?

MR. WEHRUM. Congressman, we, as I noted a moment ago, are still in the process of developing the list of boutique fuels that is required by the Energy Policy Act. Clearly the Energy Policy Act limited the number of boutiques that are available to be approved in the future.

MR. WAXMAN. That is the question I had. So these two provisions in the energy bill in August will limit the number of boutiques. You haven't finalized the answer.

MR. WEHRUM. Yes, they will, Congressman.

MR. WAXMAN. Now, do you believe it is important to involve the States which rely on benefits from these fuels in any discussion of whether and how to further limit State fuels? That is the President's approach under the Governors Task Force, right?

MR. WEHRUM. That is correct, Congressman.

MR. WAXMAN. Now the majority of Republicans here are talking about adopting a new bill to further limit States' authority to require clean burning gasoline. It appears they want to pass this bill by late May or early June. Your process with the Governors won't be completed by then, will it?

MR. WEHRUM. We intend to complete our process by the end of June, Congressman.

MR. WAXMAN. By the end of June. Now, if the majority wants to further limit clean fuels, about all that is left to do is to block any State from ever adopting a clean fuel blend that--in the future, or to force States to eliminate their existing requirements. The States have asked to testify on any such proposal but have never been permitted to do so. Now the Majority wants to short circuit the President's process to

involve the States, and today we have learned EIA is testifying that restricting the number of fuel blends too much could actually raise gas Seizing State authorities and circumventing the States' involvement is contrary to the principles of cooperative federalism, on which the Clean Air Act is based; thus in itself is objectionable. But doing this in the name of high gas prices is simply foolish. State fuels requirements were never the problem. Even if they had been, Congress just passed a bill to strictly limit such requirements, and limiting them further may raise, not lower, gas prices. I put that out for my colleagues and for the two of you to listen to, because I think we are moving this thing in this legislation so quickly that I don't think we are really going to get a full input from the States, and I fear that if we make the wrong decision, we are going to get the exact contrary of the result of what we are trying to achieve. I thank you, Mr. Chairman, and I appreciate both of your testimony, and I did want to point out what you had put in your written statements to us. I yield back the balance of my time.

MR. HALL. I thank the gentleman. The Chairman recognizes the gentlelady from North Carolina, Ms. Myrick, for 5 minutes.

MS. MYRICK. Since I had to leave the room, Mr. Chairman, I will pass on this round.

MR. HALL. I will recognize myself for a quick question of Mr. Wehrum, if I might ask you. Federal law, a certain part of the Energy Policy Act, requires the Government to examine, and I guess that means a study before they examine it and examine it as they study it, options to enhance flexibility in the fuel distribution infrastructure, reduce price volatility and cost to consumers, provide increased liquidity to the gasoline market, and enhance fuel quality consistency and supply. How far along is the Administration in their completion of this study?

MR. WEHRUM. Congressman, we are currently consulting with DOE and preparing to implement that study and fully intend to complete it by August, which is the statutory deadline.

MR. HALL. August of this year?

MR. WEHRUM. That is correct, Congressman.

MR. HALL. And would it be possible to accelerate the work, get it a little earlier for us? Some of us are rushing toward November.

MR. WEHRUM. We will move as expeditiously as we can manage, Congressman.

MR. HALL. That is what I am asking. One other question to--I guess also to you. Will any of the boutique fuels currently approved and used today become functionally identical to the Federal fuels requirements, and would they then no longer be considered boutique?

MR. WEHRUM. Congressman, the answer to the first question is we believe the answer is yes, and Atlanta is a good case in point, which has

a combination of volatility standards and sulfur standards in place for gasoline, and we believe, once our Federal programs have been fully implemented, that the Atlanta program and the Federal program will be very consistent as it applies to those requirements. In answer to the second question, the boutique standard would remain part of the State Implementation Plan unless and until the State requested that it be removed and EPA approved that request. So there is not an automatic mechanism that would make it go away.

MR. HALL. I thank you very much. The Chair recognizes the gentleman from Texas, Mr. Green, for 5 minutes.

MR. GREEN. Thank you, Mr. Chairman. Mr. Wehrum, the President made a televised speech address in response to the public outrage on gasoline prices and he was going to direct the EPA to take a number of actions, like waivers, to try and reduce the prices. The State of Texas asked for a waiver from the RFG requirements due to the ethanol supply problems mentioned by the EIA in their testimony. A number of States like Virginia didn't ask for the waiver, since EPA staff said they wouldn't get one. Other States don't think they will get a waiver, since they haven't heard back, despite the President's speech. Do you know a timeframe for Texas to get a response, when you consider the fact that the EIA says the ethanol transition in Texas is the most difficult in the entire Nation?

MR. WEHRUM. Congressman, the President has asked Administrator Johnson and ourselves to act quickly and aggressively on requests for waivers of fuel standards under the Energy Policy Act provision. To my knowledge, we actually have not received an official request from the State of Texas. Having said that, there has been a tremendous amount of dialogue between folks on my staff and various officials in the State of Texas, as well as the fuel producers and suppliers and distributors, to understand the situation and make a judgment as to whether a waiver is appropriate under the standards set by the Energy Policy Act. And to date, the information we have received indicates that, at least to this point, it doesn't appear that a waiver is necessary.

MR. GREEN. Okay. But do you know you haven't received a request from the State of Texas?

MR. WEHRUM. That is correct, Congressman.

MR. GREEN. Okay, I will follow up on that. Mr. Gruenspecht, your testimony notes that we have a very tight ethanol market due to limited ethanol production capacity and that this is causing some Midwest ethanol to be shifted to RFG areas, which many are major urban areas outside the Corn Belt, and again, Houston, Texas, and we benefited from reformulated gas, although it is all MTBE up until recently. Many States in the Midwest have state-level ethanol mandates. Do these mandates

have the potential to limit the flexibility to move ethanol around where it is needed?

MR. GRUENSPECHT. It is our view that there is enough flexibility. There is enough ethanol that can be moved, that would be moved, but there definitely are logistical challenges in moving it. It is less the State policies that are the logistical challenges of moving the ethanol out of the Midwest

MR. GREEN. So logistical is a bigger problem than a State--

MR. GRUENSPECHT. I think logistical is the big problem this year.

MR. GREEN. You know, I have information, for example, that in Dallas, Texas, that there are railcars waiting to unload ethanol, but not enough distribution facilities available. Do you have any knowledge of that? Or any other urban areas like Dallas, Texas, that we have heard.

MR. GRUENSPECHT. I understand that there are rail bottlenecks in Dallas and that they need to use some tanker trucks to get the ethanol around rather than directly off the train. So there are some difficulties, but again, that is more the logistics category than the State mandates for ethanol.

MR. GREEN. Yes. That was what I was following up on, because our committee understood when we eliminated or didn't provide the protection for MTBE, that you can't pipeline ethanol and that is what you have when you can't pipeline it. Would you elaborate and discuss on whether we can expect any increase in the ethanol production capacity here along the Gulf Coast so we don't have to ship it from the Midwest by rail or even tanker truck?

MR. GRUENSPECHT. This is really just out of news reports, but I thought there was some discussion of ethanol production capacity, I believe, in Louisiana, as I recall, but I am not sure what the timing is. But I know that in the short run there is a lot of capacity planned, mostly in the Midwest, and I think that the bulk of it would still come from the Midwest.

MR. GREEN. Okay. So we still have problems with distribution because I don't know if we are laying a lot of new rail lines, although I know some distribution facilities are trying to ramp up, but you know, the law--the energy bill was signed last August and here we are in the middle of May almost and we are seeing those problems come to a head. Could you give us some information on how the elimination of the oxygenate mandate and the widespread use of MTBE is leading to an increased reliance on gasoline imports, on the imports of both gasoline but also the potential for importing ethanol? The question, I guess, is the elimination of the oxygenate mandate and the elimination of-because we use MTBE in so many areas in the country outside of the Midwest. Is

there any estimation of what would help us--what the percentage would be for gasoline imports or ethanol imports?

MR. GRUENSPECHT. Again, it is my understanding that there may be some short-term increase in ethanol imports under current law, but the bulk of the ethanol will be taken out of the Midwest, moved to the RFG areas, and again, two-thirds of the RFG had already gone over to ethanol before this year, in California, New York, Connecticut. The Midwest was already ethanol-based RFG. It was really the East Coast, outside of New York and Connecticut, and Texas that will still be MTBE areas. I think there will probably be some extra conventional gasoline used in the Midwest as the ethanol comes out of there and goes to the RFG areas in Texas and the East Coast, outside of New York and Connecticut.

CHAIRMAN BARTON. The gentleman's time has expired.

MR. GREEN. Thank you, Mr. Chairman.

CHAIRMAN BARTON. Yes. The gentleman from Arizona, Mr. Shadegg.

MR. SHADEGG. Thank you. Mr. Gruenspecht, I want to clarify some points in your testimony. Earlier this year, you issued a report, EIA did, entitled, "Eliminating MTBE in Gasoline," in which you estimated that U.S. domestic ethanol production would fall 130,000 barrels per day short on average this year. Later in March, Administrator Caruso testified before the Senate and reaffirmed that estimate. As I understand your testimony today, you are reaffirming that estimate again. You are saying that if we were to leave the current ethanol where it is currently being consumed, we would fall 130,000 barrels per day short in the remainder of the country. But as you explained in your testimony, what is in fact happening is we are reducing the amount of ethanol used in the Midwest and trying to ship it now, I guess, with logistic problems, to the other areas of the country, is that correct?

MR. GRUENSPECHT. We need to replace the MTBE. We need 130,000 barrels of ethanol. Ethanol production capacity is growing, but it has not grown 130,000 barrels, so I wouldn't say, you know--

MR. SHADEGG. Just by your estimate, is that correct?

MR. GRUENSPECHT. That you need 130,000 barrels of ethanol to replace the MTBE where it had been used, ves.

MR. SHADEGG. And I that I thought was based on your testimony, it was 263,000 barrels per day produced in 2005. The need is 390,000 barrels per day, absent MTBE and that is where the 130,000 barrels per day comes from, is that correct?

MR. GRUENSPECHT. That is adding up last year's supply and this extra 130,000.

Mr. SHADEGG. Right.

MR. GRUENSPECHT. And I mentioned that production capacity, or production in February was about 302,000.

MR. SHADEGG. And in response to the Chairman's question, I believe you indicated that--and I am not sure, he thought it was 10,000--I thought I heard 20,000 barrels per day currently imported. Which was it or do you know?

MR. GRUENSPECHT. It's 22,000 barrels per day. I was doing it in gallons and making the translation.

MR. SHADEGG. Yes, I heard that little discussion of 80 million gallons.

MR. GRUENSPECHT. Twenty-two thousand barrels a day total ethanol imports.

MR. SHADEGG. Imports now?

MR. GRUENSPECHT. Imports now.

MR. SHADEGG. And your belief was that that could climb by an additional 10,000 to 20,000?

MR. GRUENSPECHT. Yes, in that neighborhood.

MR. SHADEGG. Which means it would nearly double?

MR. GRUENSPECHT. If it was 20,000, it would double.

MR. SHADEGG. It would in fact double. One of the issues is, well, where would we get this additional ethanol, and I believe one of your responses was, well, you understand the ethanol market worldwide is tight right now. A fair amount of that ethanol is produced and consumed in Brazil and as I understand it, Brazil recently reduced their ethanol quotient or proportion from 25 percent to 20 percent, I believe, in response to the tight market, is that correct?

MR. GRUENSPECHT. I understand that to be the case.

MR. SHADEGG. And that is like what you are talking about in the Midwest right now, we are reducing the proportion of ethanol in gasoline in the Midwest because of the demand for that ethanol elsewhere around the country, is that correct?

MR. GRUENSPECHT. On average, that is correct.

MR. SHADEGG. On average.

MR. GRUENSPECHT. It is not like it is reduced from 10 percent to a 9 percent blend. It is that there is less of the 10 percent blend being used.

MR. SHADEGG. Okay. My understanding would be that--two points I want to make from that. One is, to the extent that ethanol helps clean the air, wherever we reduce the use of ethanol in the Midwest, we are losing the advantage that ethanol has for cleaner air, is that correct? Maybe I would ask your colleague. I am sorry.

MR. GRUENSPECHT. Yes, I think he knows more about clean air than I do.

MR. SHADEGG. You would agree with that, wouldn't you?

MR. WEHRUM. Could you repeat your question, please, Congressman?

MR. SHADEGG. The point is that under the current situation, because we do not produce enough ethanol domestically to meet domestic demand, we are in some locations reducing the amount of ethanol in the country that is in the gasoline because it is being placed somewhere else. That is going to lose the air cleaning advantages in those portions of the country where we reduce reliance on ethanol, correct?

MR. WEHRUM. That is correct, Congressman.

MR. SHADEGG. The other question I had, back from you, Mr. Gruenspecht, if Brazil, for example, were the import tariff to be lifted temporarily on ethanol, that tariff that I spoke of, 2.5 percent plus 54 cents a gallon, there is at least a prospect that the market would cause Brazil to say, well, it doesn't even need 20 percent ethanol in its gasoline, it could go to 15 percent if the market price, world market price for that ethanol made it more economical to sell it in the United States than to consume it in Brazil.

MR. GRUENSPECHT. I hate to speculate on U.S. policy, I really hesitate to speculate on Brazilian policy, but I do follow your logic.

MR. SHADEGG. You follow the point. The point is, some people say, well, there is no point in reducing the tariff because we are already importing virtually all that is bring produced. My point is, the market will decide that. With the tariff gone, the cost of selling that ethanol in the United States would go down and the incentives to import it would go up, which is why some of us are advocating that we ought to eliminate that tariff at least temporarily. I don't advocate its permanent elimination, but I believe, if we are looking for immediate solutions for American consumers for this year, everything we can do we should be doing and that is one of the things that is an option open to us. And at least the President last week discussed the issue with several members in Congress, isn't that correct?

MR. GRUENSPECHT. Yes, and I believe Secretary Bodman did as well.

MR. SHADEGG. I don't have any further questions, Mr. Chairman.

CHAIRMAN BARTON. Before we yield to Mr. Stupak, if we were to eliminate the tariff, what is the estimate of the amount of ethanol that could be expected to immediately be imported per day? In other words, if we eliminate the tariff next week, when would you get a supply response in the U.S. market and how big would it be?

MR. GRUENSPECHT. Again, our review of the supply response is on the order of 10,000 to 20,000 barrels a day and--

CHAIRMAN BARTON. And how soon?

MR. GRUENSPECHT. Relatively soon.

CHAIRMAN BARTON. Within two weeks after the tariff was reduced? I mean, it takes a certain amount of time.

MR. GRUENSPECHT. Yes, a certain amount of time to transit, but Brazil is not that far.

CHAIRMAN BARTON. And it wouldn't be next January?

MR. GRUENSPECHT. No, it could before that.

CHAIRMAN BARTON. It could be this summer?

MR. GRUENSPECHT. It could be before then, yes.

CHAIRMAN BARTON. Okay. And I thought, in Brazil, the ethanol used was 100 percent ethanol in their vehicles. Is it a blend? I thought that they actually were an ethanol economy, but I am a little confused. Is it like a 90/10 or an 80/20 blend and it is gasoline and ethanol?

MR. GRUENSPECHT. I thought they have flex fuel vehicles, I believe, to a significant extent.

CHAIRMAN BARTON. See, maybe I could just be wrong, but I thought you could actually drive a vehicle in Brazil that used pure ethanol, it is 100 percent ethanol.

MR. GRUENSPECHT. They use something like our E-85, I think.

CHAIRMAN BARTON. So it is a gasoline/ethanol blend.

MR. GRUENSPECHT. I think they use a lot of gasoline/ethanol blend.

CHAIRMAN BARTON. Okay. Mr. Stupak.

MR. STUPAK. Thank you, Mr. Chairman. Just to follow up on that question, even if we looked at the import of the E-85, is there a shortage in America of the E-85 fuel? I mean, from where I live, it was not around, I mean, if even you want to use it.

MR. GRUENSPECHT. I think what is being suggested is that if Brazil would lower its proportion of ethanol use, they would not ship E-85 here, they would ship ethanol here.

MR. STUPAK. Okay. So it would be the ethanol. It is about 10 percent in a regular gallon of gas?

MR. GRUENSPECHT. It is about 10 percent in gasohol and reformulated gasoline, and there is lots of gasoline in this country that doesn't use any ethanol at all.

MR. STUPAK. Correct, correct. Okay. Let me ask you another question, Mr. Gruenspecht. Another question the Chairman had asked earlier. In your testimony, you referred to the crack spread, the difference between the value of a barrel of crude oil and an equal amount of refined gas. The Chairman asked you about the spread and you replied that the spread is currently about \$20 per barrel but should be closer to \$8 to \$9 a barrel, I thought you said. Where does the extra money go? If it's \$8--use \$8 so it is easy math for me. \$8, if it should be \$8, it is \$20. Where does that extra \$12 go?

MR. GRUENSPECHT. Well, it is cost and profit of the refining sector together. That is what the crack spread represents.

MR. STUPAK. So the 12 bucks would go to refiners?

MR. GRUENSPECHT. Profitability in the refining sector is much better than it has been historically. And indeed that is again why we are seeing more interest in refinery capacity additions.

MR. STUPAK. So when you speak about September 2004 until September 2005, there is evidence that the refinery costs went up 255 percent in this country. Would part of that be because of this crack spread?

MR. GRUENSPECHT. Again, I think that is a discussion I believe you had with Secretary Bodman.

MR. STUPAK. Yes.

MR. GRUENSPECHT. Yes, this is a Washington Post number.

MR. STUPAK. Article, correct.

MR. GRUENSPECHT. Article. I am trying to get a handle on that. Let us see where we are on this.

MR. STUPAK. Yes, when the Secretary testified, he said he would get back with us. We are still awaiting the answers to our questions.

MR. GRUENSPECHT. Yes. Again, it is the crack spread. It was clearly heavily influenced since September 2005 by the effects of Hurricane Katrina. As I recall, the pipelines--including the Plantation pipeline--were down. U.S. refiners lost about four million barrels a day of capacity, so, yes, the value of a barrel of gasoline, with a loss of 25 percent of U.S. refining capacity, shot up dramatically.

MR. STUPAK. We had hoped that 255 percent just wouldn't be from Hurricane Katrina, which hit on August 31 and the 1st of 2005. I am talking about September 2004 until September 2005. So Katrina, if it had that dramatic of an effect, would have to make that effect in 30 days or 31 days and we are talking about a whole year's spread.

MR. GRUENSPECHT. Well, actually, it is my understanding that the calculation that you are describing, I realize it is not yours, it is a Washington Post calculation, was comparing the average crack spread in September 2004 to a single day crack spread of September 5, which was Labor Day in 2005.

MR. STUPAK. Sure. So if you are using this crack spread and if you are using Hurricane Katrina--

MR. GRUENSPECHT. Yes.

MR. STUPAK. --and if it represents a 255 percent increase, when it should be \$8 a barrel, probably, as opposed to--it had to be more than 20 bucks a barrel then, and you did take advantage of Hurricane Katrina as an excuse to jack up those prices, or to increase the spread, as we would say.

MR. GRUENSPECHT. Again, given the tremendous loss in the capability to produce gasoline, it is not surprising that the price of gasoline rose dramatically.

MR. STUPAK. Sure.

MR. GRUENSPECHT. And to the extent that the price of crude oil did not rise that dramatically, in part because of policy to release or make oil available from the strategic petroleum reserve--

MR. STUPAK. Sure.

MR. GRUENSPECHT. --that spread would naturally open up. Unfortunately, there was less of an opportunity to offset the effect of Katrina on refined product prices than on crude oil prices.

MR. STUPAK. Sure. Let us go to the transition of winter fuels to the summer fuels. We are seeing more significant increases, compared to this time last year, based on what factors? We are up at least 70 cents, 72 cents I think I said in my opening.

MR. GRUENSPECHT. I agree.

MR. STUPAK. So what would be the difference?

MR. GRUENSPECHT. I think crude oil is first and foremost the main factor that has been driving gasoline prices. That, plus, as the testimony also points out, there were two sort of special or shorter term circumstances, one being the fact that our winter-to-summer transition also included a transition, in certain parts of the country, from reformulated gasoline with MTBE to reformulated gasoline with alcohol, and the other being that we have still significant refinery problems. It is really not just the hurricanes, there was one large refinery in Texas that had a couple of explosions, I think, last year and that was still slow coming back. There are still a couple of refineries that are not fully back from Katrina, and there was a lot of refinery maintenance this April, a larger than usual amount, some of that being deferred maintenance, so you could attribute some of that to the hurricane. Some of that may be having to do with some of the specifications, like ultra-low sulfur diesel coming up later this year.

MR. STUPAK. So should we, then, if we are concerned about these transition periods, we can't seem to get them leveled off, shouldn't we be concerned then about--

CHAIRMAN BARTON. This will be the gentleman's last question.

MR. STUPAK. Thank you, Mr. Chairman--about the expected high cost of heating our homes this winter, home heating oil? Shouldn't we really be addressing that now, then, so we can try to resolve that, so that transition, an increase or a spike or a spread, whatever you want to call it, won't be so great this winter?

MR. GRUENSPECHT. The transition to the winter is a lot less complicated than the transition from winter to summer. Summer to

winter is a lot easier because you are not worried about the mixing of fuels. I think the big effect, in terms of diesel fuel, will be the ultra-low sulfur diesel switch-over this year, and also the price of crude oil. Again, that is going to drive home heating oil prices this year.

MR. STUPAK. Thank you.

CHAIRMAN BARTON. Thank you, Congressman Stupak. Congresswoman Blackburn. And are you 5 minutes or 8 minutes?

MRS. BLACKBURN. I hope I am 8.

CHAIRMAN BARTON. Okay, I couldn't--

MRS. BLACKBURN. I waived my opening statement--

CHAIRMAN BARTON. You are 8.

MRS. BLACKBURN. --because I have three questions for Dr. Gruenspecht that I would like to ask.

CHAIRMAN BARTON. The gentlelady is recognized for 8 minutes.

MRS. BLACKBURN. Thank you. And then one for Mr. Wehrum. Dr. Gruenspecht, I want to talk about refinery capacity utilization, and we had Administrator Caruso with us last week--

MR. GRUENSPECHT. Yes.

MRS. BLACKBURN. --and talked with him a little bit about this and that we are at 95 percent capacity, and that is so high, especially when you look at world capacity as high as it is, and we have heard a lot about India and China and you all have mentioned repeatedly the impact that that has on a worldwide market. So are they building refineries or are they just serving as end users of the product?

MR. GRUENSPECHT. I believe there is refinery expansion underway in Asia, but my understanding is it is also having a hard time keeping up with demand growth, so this is a worldwide--

MRS. BLACKBURN. But they are building new refineries.

MR. GRUENSPECHT. I believe they are, yes.

MRS. BLACKBURN. Okay. And then, how long does it take them to get one stood up over there, do you know?

MR. GRUENSPECHT. I think a refinery takes, as it takes here, several years to build.

MRS. BLACKBURN. It does?

MR. GRUENSPECHT. It does.

MRS. BLACKBURN. Okay. And the regulatory environment in the United States, have we just made it too difficult to build a new refinery?

MR. GRUENSPECHT. It is my understanding that the most costeffective way to add refinery capacity is, in many cases, to add to existing refineries and that is what many of the projects that I mentioned-I mentioned the total of 1.5 million barrels. I think nearly all of those are add-ons to existing refineries. MRS. BLACKBURN. And do you think the permit process and everything is just--the add-on is much easier than trying to go the new route?

MR. GRUENSPECHT. I think the add-on is cheaper--

MRS. BLACKBURN. Okay.

MR. GRUENSPECHT. -- than going the new route.

MRS. BLACKBURN. It is cheaper?

MR. GRUENSPECHT. I believe it is cheaper.

MRS. BLACKBURN. Okay.

MR. GRUENSPECHT. Because you have a lot of the infrastructure already there that you can use.

MRS. BLACKBURN. Okay. All right. Let us talk about windfall profits tax, because we hear folks bringing that back around and they are saying that that is possibly something that they would advocate for, or changing the way that we measure inventory, in order to be able to increase taxes on oil company profits. So looking at that windfall profits or changing the inventory structure, the measurement--

MR. GRUENSPECHT. Yes.

MRS. BLACKBURN. --so that you could tax more, would that have a positive or a negative effect on investment in the new crude oil resources or the refining process?

MR. GRUENSPECHT. Well, speaking to the crude oil resources, I can say that internationally, where most of the crude oil is one of the problems that I think has been impeding investment has been the tendency of some governments--I think, Venezuela, perhaps to some extent Russia--to sort of renegotiate deals as the market price changes to try to extract more. At the time a deal is put together, if there is a perception that the upside will be taken away--if there is an upside, but that if there is a downside, say, world crude oil prices turn down, then tough luck on the investor--that does have an effect and I think we have seen that internationally in the development of crude oil markets. One could draw an analogy, perhaps, to that type of effect domestically. In other words, returns from refining from 1990 to 1999 were extremely low and nobody was offering much in the way of added returns during those years. So there is a perception that if you take a risk and if things turn out well, you will be subject to large taxation.

MRS. BLACKBURN. Right.

MR. GRUENSPECHT. But if things turn out poorly, you are on your own. That does tend to have a somewhat discouraging effect.

MRS. BLACKBURN. Both in the near end and the long term. So you mentioned Contango and Administrator Caruso had talked about that last week.

MR. GRUENSPECHT. Yes.

MRS. BLACKBURN. That was one of the reasons the current market is in Cantango's because of the feared disruption of the supplies, and in the future, either events from overseas or from the hurricanes we know are going to affect that, so we--going back to the refinery issue and being near capacity and needing expansion and needing more capacity on new-here, new refining capacity in the United States, one would think that that should be an encouragement for building refineries or getting some of these out of the Gulf Coast area, and also for opening up some more domestic supplies. Do you have any further comment on that?

MR. GRUENSPECHT. Again, I think we are seeing an environment where lots of new refinery projects are being announced. Lots of them are on the Gulf Coast because that is where a lot of the existing refining capacity is. And again, there are some economic advantages in adding on to that. It does create some of the risks that you have described. In terms of crude oil, most of the attractive prospects are elsewhere in the world and some of the problems that we have discussed I think are affecting the pace of the development of those.

MRS. BLACKBURN. Thank you. I appreciate that. Mr. Wehrum, I have got just really one thing for you, dealing with New Source Review primarily. I would like to get your thoughts on this, because we know in 1998 the EPA came out with the Petroleum Refinery Initiative and we had actions that were taken under New Source Review, and it seemed at that time that--and going forward it seemed that several projects and things that formerly had been called routine maintenance were now considered to be major repairs and changes. And what I would like to know from you, just a point of a clarification, do you think that there is in the industry confusion about New Source Review and what that requires?

MR. WEHRUM. Congresswoman, we took a very close look at this question a couple years ago. When the President published his National Energy Policy, he asked EPA to investigate the impact of New Source Review on the energy sector, including the refinery part of that sector. In our conclusions, we did decide that uncertainty was one aspect. Well, we concluded that NSR was in fact having an impact on the energy sector, at least as it applied to the existing facilities, and we also said that uncertainty was one aspect of the program that was causing an impact. And I will say, we have gone to great lengths during this Administration to try to reform the NSR program to try to make it easier, simpler, faster and just a better program all the way around, and I feel like we have had some great--some good success at that.

MRS. BLACKBURN. Great. Thank you for that. And I think that is important. We just heard Dr. Gruenspecht use the word cheaper in talking about expanding and reforming existing space, rather than trying

to get new refineries into the ground and of course we know that that means individuals are going to end up paying less when they actually go to the pump and make that purchase. So I appreciate your comments and I appreciate your testimony and being able to look at those New Source Review regulations and look at the effect that they are having on the expansion and on the building of new refineries with the expansion of existing ones.

CHAIRMAN BARTON. The gentlelady's time has expired.

MRS. BLACKBURN. Thank you.

CHAIRMAN BARTON. The gentleman from Washington State, Mr. Inslee.

MR. INSLEE. Thank you. Gentlemen, I represent a district in Washington.

CHAIRMAN BARTON. Did you give an opening statement?

MR. INSLEE. I did not.

CHAIRMAN BARTON. So you are an 8 minute guy.

MR. INSLEE. Thank you very much. Well, some would say even 10, Mr. Chairman. We in Washington have been hit twice now with the second energy costs anomaly. The first was in the Enron debacle, when some of the raiders took over a billion dollars out of our economy, and now we are having sort of the second shock wave hitting, so this is of single moment to my constituents. And what they are telling me is what I think is common sense, is that Congress needs to rather than tinker around the edges and offer gimmicks like a hundred buck check to make everybody sort of have a happy meal and go away and leave Congress alone; it just isn't going to cut the muster. We need to do some significant things to restructure the energy markets to provide alternatives to the existing fuels that can be, in effect, an alternative and can keep prices down.

Now, I was just reading the Wall Street Journal this morning, an article published some time ago about Brazil, and in Brazil the Ford Motor Company has an advertisement running right now that has a guy pull up to the pump and he can't decide between whether he likes chocolate or vanilla, and he can't decide whether he likes blondes or brunettes, and he can't decide whether he likes gasoline or ethanol, but he can burn both, so he decides on whatever is cheapest, because in Brazil, unlike this country, several years ago they decided to have a real energy policy that would create real alternatives to gas and oil and give real consumers real choices. So cars in Brazil now, when you--you are free. You are not addicted to oil. You have got freedom because you drive a car that can burn either ethanol or gasoline. The Ford Motor Company is making them, General Motors is making, they work and as a result, I believe they have kept down some of the gasoline prices in

Brazil, because now you have an alternative competitor with the existing markets.

So we are going to be talking. Just right after this hearing there will be some amendments to try to inspire the creation of a flex-fuel car industry here so that Americans can have that choice. So I guess the question I have, a long question, what are the salutary benefits of developing an alternative fuel to gas and oil and truly make it available to Americans, as far as the price, once you get a competitor fuel source in this economy?

MR. GRUENSPECHT. I will try to be brief. My understanding is that there are about five to six million vehicles in the United States that are flex-fuel vehicles that can burn E-85, which is 85 percent ethanol and 15 percent gasoline, so we have those vehicles. The people who own those vehicles are not filling them up in this country with ethanol, with E-85, and there are some issues with the availability of it and it is my understanding that it is available in only 600 stations. There are also issues with the price of it, I would imagine, because as we discussed, right now the price of a gallon of ethanol, when the market is in balance in this country, is the wholesale price of gasoline plus about 50 cents, which is the tax credit that we give. A gallon of ethanol has about two-thirds the energy content of a gallon of gasoline, so right now, if you bought ethanol at the market price and put it in your flex-fuel vehicle, you wouldn't be very happy--that is my understanding.

MR. INSLEE. Right. But 15 years ago, those exact conditions existed in Brazil and they said we can't do this because ethanol costs a little more than gasoline and we have only got 10 percent of our cars that are flex-fuel and therefore let us just go and call it a day and go home. But the people in Brazil said, no, we are going to develop a policy that is going to take care of both the chicken and the egg. It is going to drive the production of more flex-fuel vehicles, which creates demand for ethanol, which gives confidence to the investors to develop the distribution system for ethanol, and we are going to help the development of the distribution system with some tax incentives and otherwise to help the distributors make those investments, and they took care of both the chicken and the egg and now 40 percent of all their transportation fuels are in fact ethanol, which are as cheap or cheaper than gasoline under market conditions in Brazil. And the way they did that is that once they started to do this, they increased their sugar cane production by a factor of three. They now get three times as much alcohol per acre in Brazil as they did 20 years ago because they didn't have the status quo mentality, and they got 20 times more flex-fuel cars on the roads because they said there is going to be a market or pumps available to them. I guess what I am saying is that if we look forward

like we did in the space race, other than saying we don't have computers, so we will never get to the moon, Brazil adopted some visionary policies. Now, if you assume that we are at least as smart as the Brazilians and can have at least the efficiency of Brazilians in cellulosic ethanol some day, we may not have it right now, but if you make the assumption that we will, and we do develop the policies that have most if not all of our new cars coming out as flex-fuel vehicles, will not that have a salutary benefit by creating a competitive fuel competitive with gasoline and at least try to dampen some of these price increases? And I will just tell you, that has been the Brazilian experience, which, by the way, last week celebrated national independence. They are totally self-sufficient in energy right now.

MR. GRUENSPECHT. Well, they are.

MR. INSLEE. So I was just wondering, if you make those assumptions, would it have that benefit?

MR. GRUENSPECHT. Well, if you make those--if you can get ethanol that is competitive on a fuel-value basis, there is a tremendous potential to displace petroleum-based fuels. Clearly Brazil has some advantages. They are the world's low-cost producer of sugar. You know, that has been the case for a long time. I think American farmers are very smart, but on the other hand, there are some natural conditions in Brazil that make the equatorial countries more suited for cheap production of sugar. But again, American ingenuity is a good thing. The other thing that Brazil does is, of course, it allows significant offshore development, so part of their independence, I think, has related to their increasing oil production as well as, again, their very--

MR. INSLEE. Right.

MR. GRUENSPECHT. --strong program in ethanol.

MR. INSLEE. We intend to have our first commercial cellulosic ethanol plant out of the Northwest, in Southeastern Idaho. It is ready to go, just waiting for the loan guarantees to get consummated. I will just tell you, there is an asset I think Americans have that at least equals Brazilians, which is technological innovation capabilities. What we have lacked is the Brazilian vision to make this happen and I am just hoping, this afternoon, we can take some modest steps in that direction to unleash Americans' inventiveness, together with our top soil. I think it would both be a marriage. I want to ask you this quick question. If you prepare gasoline on a price volatility basis, many of us are concerned about the lack of oversight over the speculative markets that really don't have much transparency or openness right now, unlike other regulated markets in commodities. What comments would you give us about the volatility of gasoline relative to other commodities that in fact are subject to the

Commodities Futures Trading Program, which gives transparency and some degree of regulation to those speculative markets?

MR. GRUENSPECHT. Well, I do believe that the gasoline contracts that are traded on the organized exchanges are subject to the same rules as other exchange-traded futures contracts, so again, I am not representing the financial regulators. As I said in my testimony, I think most of what is going on is really driven by fundamental market forces. It is certainly true that the volume of nonphysical trade has increased in recent years, but I have a feeling that the speculation is more an effect of the real market conditions than the cause of them, than the cause of high prices in this setting. I think the rise in world oil prices has maybe attracted some types of investors who don't have a physical interest in the market, but I have not seen anything that suggests that speculative activity is behind the trend in gasoline prices, and I think it is more, again, the crude oil prices, the transitions, the tight refining situation. The fundamentals can explain, I think, most of what is going on.

MR. INSLEE. Thank you.

MR. BOUCHER. [Presiding] Thank you very much, the gentleman from Washington, and the Chair recognizes the gentlewoman from Wyoming, Ms. Cubin.

MRS. CUBIN. Thank you, Mr. Chairman. Excuse me. My first question will to go Mr. Gruenspecht. I recently sent a letter of inquiry to your boss, Administrator Caruso. This goes along with what Congresswoman Bono was asking you. And my letter asked why the cost of gasoline and other refined products at the pump in Wyoming are not reflective of the low prices crude oil has been trading for in my home State, and this is not a new phenomenon with this energy crunch. This has been going on for a long time. I wonder if you can provide any insight into that matter. And as you may know, during the first week of March of this year, crude oil was trading for \$61 a barrel nationally, but for roughly half of that in Wyoming. And so it isn't exactly the same issue that we have been discussing here, but if Wyoming crude is selling so much cheaper, why are those savings not being passed on to Wyoming consumers? But first of all, why is Wyoming making about half on their crude oil that other States are?

MR. GRUENSPECHT. Well, again, I think, in terms of your letter, we are in the process of working on that, so you will have that shortly. Let me begin with that. But in the earlier discussion with Representative Bono, we discussed the different qualities of crude oil.

MRS. CUBIN. Right. But that doesn't fit my situation, because I am talking about the qualities of the oil being the same.

MR. GRUENSPECHT. Right.

MRS. CUBIN. And we are getting half, at any given time--

MR. GRUENSPECHT. Right.

MRS. CUBIN. --half to significantly less for the exact same quality of oil that places in Oklahoma, Louisiana or so on--

MR. GRUENSPECHT. right.

MRS. CUBIN. -- are getting and I wondered if you can explain why.

MR. GRUENSPECHT. Well, I want to take the time to get it right and again, we will answer by letter. I also understand that certain oilfields tend to be tied economically to certain refineries, through certain pipelines, and it is my understanding that changes if a particular refinery or buyer of a particular source of crude oil is down for maintenance, that can have a significant effect on the price of oil. I am not saying that that is the case. I am trying to be responsive at the table, but I will get back to you with--

MRS. CUBIN. Good.

MR. GRUENSPECHT. --a full answer.

MRS. CUBIN. Good. Because, you know, just to help you avoid some of those--

MR. GRUENSPECHT. Right.

MRS. CUBIN. --pitfalls that lapses in discussion that we are having right now, this isn't a particular instance. This has been an extremely long time that this has been going on, and so that is the question I would like to have answered. And any possible fixes you might be able to suggest, as well, would be appreciated and I am willing to wait for that letter. I understand this isn't an easy question because it has a long history. I have another question for you. What rate of growth is necessary, do you think, in our domestic refining capacity to keep up with demand? You mentioned in your testimony that "we are now seeing major capacity expansion announcements," which I agree is encouraging. However, what level of expansion will it take to get back to the comfort level of excess refining capacity that we had 30 years ago?

MR. GRUENSPECHT. I think 30 years ago we had a comfort level from one side of the market, maybe not too comfortable from the other side of the market, in the sense that there was a lot of refining capacity--

MRS. CUBIN. Yes.

MR. GRUENSPECHT. --in this country in the late 1970s, early 1980s, and then refining capacity generally declined until the, say, the early 1990s.

MRS. CUBIN. Right. Wyoming shut down--

MR. GRUENSPECHT. Right.

MRS. CUBIN. --many refineries during that period.

MR. GRUENSPECHT. Many I think would have been called in front of your committee "tea kettle" refineries.

MRS. CUBIN. Yes.

MR. GRUENSPECHT. I would not want to insult any refinery.

MRS. CUBIN. I wouldn't find that insulting.

MR. GRUENSPECHT. I think that term has been used. And then, since about 1993, refinery capacity has been growing. But again, over the last 5 years, I think refinery capacity has been growing a lot slower than demand. The 1.5 million barrels, maybe 1.7 million barrels of-

MRS. CUBIN. Million or billion?

MR. GRUENSPECHT. Million barrels a day--

MRS. CUBIN. Yes.

MR. GRUENSPECHT. --that we think would come on board. Right now, we are doing about--we have about 17.3 million barrels a day, so that would be about a 10 percent increase in capacity. That is what we think is likely possible before 2010. That would be pretty healthy. That would be faster than demand growth.

MRS. CUBIN. Okay, that was my next question. I know that--

MR. GRUENSPECHT. So that would be a 10 percent increase over about a 4 year period. That would be more than 2 percent a year on average. Again, a lot of that is sort of back-loaded, but refinery capacity between now and 2010 would have grown faster than demand, if in fact we get 1.7 additional refinery capacity by 2010.

MRS. CUBIN. And we don't have announcements for that many at this time, right?

MR. GRUENSPECHT. I think we have announcements for about 1.5.

MRS. CUBIN. Okay.

MR. GRUENSPECHT. That is the way we count it. There is also a lot of what is called capacity creep--

MRS. CUBIN. Right, right.

MR. GRUENSPECHT. --the very small adjustments that people don't announce. And looking at the historical trends in capacity, we think it is reasonable to think of capacity creep adding another 200,000 barrels a day.

MRS. CUBIN. And so you are estimating future demand and future hopeful capacity, and by 2010, you think--

MR. GRUENSPECHT. I guess, from the point of view of the consumer, a more comfortable situation than today.

MRS. CUBIN. Thank you.

CHAIRMAN BARTON. The gentlelady's time has expired. The gentleman from Oregon, Mr. Walden.

MR. WALDEN. Thank you very much, Mr. Chairman. I appreciate having this series of hearings that you have scheduled. Dr. Gruenspecht, I read through your testimony and I walked away sort of depressed. Although it is very helpful, it is--

MR. GRUENSPECHT. Only the messenger.

MR. WALDEN. I know, I know. And as I read through this, we are trying to figure out solutions here that will have both short-term and long-term benefit. We recognize with the passage of the energy bill, a lot of what we were investing in wasn't going to produce immediate results, but would set the country finally on a path towards long-term improvements in making America more energy independent. And as I read through your testimony here, when we are trying to figure out what is the right number of blends for boutique fuels, if you will, there is a downside to going to say one blend, because the refining capacity changes, or the changes in refineries would have to be made. It wouldn't be investments in new capacity. Is there a magic number of blends? I mean, are there certain blends that are made in enormous quantities versus others that are made in small amounts that do drive up the costs?

MR. GRUENSPECHT. I really don't have that off hand. I would say there is, again, this trade off between the ease of distribution and the ease of production and that is a tough--and there is also the air quality issue, which I don't mention because it is out of my jurisdiction, but--

MR. WALDEN. You see where I am going with that, though.

MR. GRUENSPECHT. Yes.

MR. WALDEN. I mean--

MR. GRUENSPECHT. But it is not just the number of blends. I mean, there is one thing to keep in mind--

MR. WALDEN. The volumes.

MR. GRUENSPECHT. If you would have, let us say, whatever number of blends you have and you had it in more geographically distinct--

MR. WALDEN. Right.

MR. GRUENSPECHT. --areas, you still have a distribution issue associated with getting whatever number of blends you have to a larger number of distinct areas. The other thing is there are differences--it is really the distinct fuels that matter and there are some fuels that are distinct, not because of State Implementation Plans, but because of other State requirements. Some of this relates to what has been done under the Clean Air Act. Some of it relates to really the number of geographic areas served with a fuel rather than simply the number of fuels.

MR. WALDEN. Well, that is, I guess, what I am trying to get at.

MR. GRUENSPECHT. And that is another--right.

MR. WALDEN. Somewhere in there you all that do this full-time must be able to give us some counsel about, if you eliminated these three or merged these two or these eight, there would be an efficiency gained that would help with the fungibility and not drive up price, I guess. And so to the extent you can get us that information, that would be helpful. Since I have only got like 2 minutes, I want to just fire off a couple others. I heard a report at some point that China and India today

consume more gasoline than the world consumed 10 years ago. Is that an accurate--

MR. GRUENSPECHT. That doesn't--

MR. WALDEN. By all--I am assuming.

MR. GRUENSPECHT. That doesn't sound right to me.

MR. WALDEN. That is why I like to ask these questions, so we don't repeat inaccuracies. But there has been an enormous growth.

MR. GRUENSPECHT. A tremendous growth in demand.

MR. WALDEN. Can you quantify that?

MR. GRUENSPECHT. I know that China's demand in 2004 grew by over a million barrels a day.

MR. WALDEN. And what is our consumption?

MR. GRUENSPECHT. Our consumption is about 20. Theirs is, I think, on the order of six and a half to seven million barrels a day. So I think they have become the number two consumer.

MR. WALDEN. Is that--

MR. GRUENSPECHT. And they are on an upward track. In our short-run projections, it is growing like half a million barrels a day per year.

MR. WALDEN. We are sort of flat, though. I mean, it is nine-tenths of a percent growth is what you are seeing or what you testified to today.

MR. GRUENSPECHT. Yes, we are certainly not growing at the pace that China is growing. They are going to be a larger and larger share of the world oil consumption, and India as well.

MR. WALDEN. Okay.

MR. GRUENSPECHT. And we are going to grow in absolute terms, but our role as a share of world consumption is, in our view, likely to decline. We are the biggest consumer now.

MR. WALDEN. And now we are going to debate fuel efficiency--

MR. GRUENSPECHT. Right.

MR. WALDEN. --standards for vehicles, which, even if we were to pass something today, is out several years. You made the comment about Brazil, that one of their keys to energy independence, in addition to development of ethanol through using sugar, is also their ability to access their own reserves. When it comes to America's energy independence, how important are all these other changes we are looking at versus accessing our own reserves? I mean, there would have been incredible quantities in Alaska and offshore.

MR. GRUENSPECHT. I mean, I don't think it is one--again, taking this longer term view--

MR. WALDEN. Right.

MR. GRUENSPECHT. --on both the demand side and the supply side, I think the Minerals Management Service has recently looked at our continental shelf reserves or potential technically recoverable oil, and

they think, in the moratorium areas, there would be, I think, 19 billion barrels of technically recoverable oil. ANWR, the mean estimate is 10 billion barrels of technically recoverable oil. So to put that in perspective, I think total proved U.S. reserves now are about 20, 21 billion barrels. So there is substantial amounts, I mean, relative to proved reserves.

MR. WALDEN. So it is nearly double?

MR. GRUENSPECHT. The proved reserves. I don't think you would double production.

MR. WALDEN. Right.

MR. GRUENSPECHT. I think production--Alaska, looking at maybe up to one million barrels a day production at full utilization, but again, that is a long way off in time.

MR. WALDEN. Right. If we were to get that million barrels a day production increase, what effect would that have on price? Do you have a ratio in your testimony?

MR. GRUENSPECHT. If you got it today, it would be very helpful, I think, because in the short run it has a bigger difference than in the long run. In the long run, our feeling is the price impact would probably be modest, but again, the energy independence impact could be significant.

MR. WALDEN. Thank you.

CHAIRMAN BARTON. The gentleman's time has expired. We have a series of three votes on the floor. We are going to recognize Dr. Burgess for the last 5 minutes of questions for this panel, then we are going to recess. When we come back at approximately 1:45, we will bring the second panel up. So, Dr. Burgess, are you ready to ask your questions? Dr. Burgess?

MR. BURGESS. Thank you, Mr. Chairman.

CHAIRMAN BARTON. This will be our last questions for this panel.

MR. BURGESS. I was just going to get some clarification on the crack spread that the chairman had brought up earlier. It was a term I was not familiar with.

MR. GRUENSPECHT. Yes.

MR. BURGESS. If you could perhaps go through that in simple declaratory sentences for me?

MR. GRUENSPECHT. Okay. You have a barrel of crude oil and that has a market value on the wholesale market. You have a barrel of gasoline and that has a value on the market. And the difference between the value of a barrel of gasoline is worth more than a barrel of crude oil and that difference is called the gasoline crack spread.

MR. BURGESS. And I missed the line of questioning from the other side, but is it fair for us to assume that that represents the built-in profit to that product?

MR. GRUENSPECHT. It is both the cost and the profit.

MR. BURGESS. Okay.

MR. GRUENSPECHT. Obviously refining is an activity that involves a lot of capital equipment, a lot of investment, so the crack spread encompasses both the cost and the profitability of refining.

MR. BURGESS. Is the cost of refining a fixed cost that would have existed at \$50 a barrel oil that will now be the same for \$75 a barrel oil? Does the cost of refining go up as the cost of crude goes up if you subtract the cost of the crude?

MR. GRUENSPECHT. There is some impact from the cost of crude because energy is used in refining, but there is also the impact of changes in specification. So, for instance, making the blendstock to blend with ethanol is more difficult than making the blendstock to blend with MTBE. So there are costs related to the specifications. They are costs related to the cost of energy used in the refinery, just like other producers who use energy in their production process, you know, their costs go up when energy costs go up. So the crack spread is not just a measure of profitability, it is a measure of cost and profitability together.

MR. BURGESS. Well, both of you obviously--and I appreciate your indulgence for being with us so long, but do either of you have an opinion as to what you would like to see this committee do as we go forward with this discussion?

MR. WEHRUM. I will just say, Congressman, that we stand ready to provide assistance. On the boutique fuels questions, there are a number of important questions in play right now, including, should we further limit beyond what the Energy Policy Act required, and should we take other steps directed at some of the other fuels programs that we implement? And those are hard questions that we are all taking a hard look at and we stand ready to help out with that.

MR. GRUENSPECHT. And we also stand ready to provide any data analyses that are requested by the committee and others. We both successfully avoided answering that.

MR. BURGESS. As the cost goes up--and you talked about this, doctor, about the utilization that--the utilization of fuel obviously goes down with the price spike. Has that impacted the product in the pipeline? Pardon the phrase. I mean, do we have more reserve available now because the price has gone up? Or, how has the price affected utilization? Is it evident enough to see that in the marketplace?

MR. GRUENSPECHT. Well, in 2005, we think, where previous gasoline demand had been growing steadily, data that we have suggests that it leveled off. In 2006, we are expecting some growth in demand again, but I think that over time, we would expect, if people believed that prices are going to be sustained at a high level, we think you will start to

see changes in behavior and changes in vehicle purchase decisions and that will be reflected in the level of demand.

MR. BURGESS. Very well. Thank you, Mr. Chairman. I will yield back so we can go vote.

CHAIRMAN BARTON. We thank you, Congressman. I had just one final clarification question for our witness from EPA. Congressman Waxman was asking about the requirements in the Energy Policy Act that restrict over time the number of boutique fuels that are available nationwide. I was one of the co-authors of that and the intention was to restrict the number of boutique fuels. There is no secret about that. My question to you is, does anything in the act lower the standards for air quality on a parts per billion basis or any kind of an 8 hour standard, or in any way did anything in the Act do anything to lower the requirement of air quality?

MR. WEHRUM. No, Congressman, it did not.

CHAIRMAN BARTON. Not a bit?

MR. WEHRUM. Mr. Chairman, it did not.

CHAIRMAN BARTON. Okay. I thank each of you. We will have follow-up written questions on both sides of the aisle. We are going to recess until after these series of votes. We will have the second panel and we will reconvene at approximately 1:45.

[Recess]

CHAIRMAN BARTON. We want to welcome our second panel. And we have with us Mr. Geoff Sundstrom, who is the Director of Public Relations for the American Automobile Association; we have Mr. Mark Cooper, who is the Research Director for the Consumer Federation of America and a frequent testifier. We are glad to have you back again. And we have Mr. John R. Wilkins, who is the Executive Vice President and CIO of the Delaware Valley Wholesale Florists Association, and he is here on behalf of the Society of American Florists. We welcome each of you gentlemen to the committee. Your statements are in the record in their entirety. We are going to recognize each of you for approximately 8 minutes to elaborate on that testimony and we will start with Mr. Sundstrom. Welcome to the committee.

STATEMENTS OF GEOFF SUNDSTROM, DIRECTOR OF PUBLIC RELATIONS, AMERICAN AUTOMOBILE ASSOCIATION; MARK COOPER, RESEARCH DIRECTOR, CONSUMER FEDERATION OF AMERICA; AND JOHN R. WILKINS, EXECUTIVE VICE PRESIDENT AND CIO, DELAWARE VALLEY WHOLESALE FLORISTS, ON BEHALF OF SOCIETY OF AMERICAN FLORISTS

MR. SUNDSTROM. Thank you, Mr. Chairman. My name is Geoff Sundstrom and I am the American Automobile Association's Director of Public Affairs. I am AAA's primary spokesman on motor fuel issues.

As you may know, AAA is the largest motorist organization in North American, with nearly 50 million members in the United States and Canada. Our members drive approximately 25 percent of all the motor vehicles in operation in this country. Using figures from the U.S. Department of Transportation, we estimate that they will purchase approximately 33 billion gallons of gasoline this year, and at current prices will spend an estimated \$96.4 billion on gasoline. Unlike others that testify on this issue, AAA has no involvement in the regulation, refining, shipping, blending, or sale of gasoline. We represent the end users of this increasingly contentious, yet completely indispensable product.

Our members are very concerned about whether gasoline is going to remain readily available at a reasonable cost in the United States, or if we are slowing moving toward an era of much higher prices with even less reliable supplies of fuel? After Hurricane Katrina, Americans paid the highest prices ever for gasoline, an average of \$3.05 per gallon on Labor Day weekend of last year. As unpleasant as that experience was, the public clearly understood that the storm had harmed vital components of our energy infrastructure, and while fuel prices were exceptionally high, it was a common belief at that time that the situation would be temporary and that gas prices would come back down. Since the beginning of 2006, however, the national average price of self-serve gasoline has jumped from \$1.78 per gallon to \$2.92 per gallon, a whopping increase of \$1.14 per gallon in just a few months.

Many motorists are now alarmed that the rising gas prices have become a permanent part of our lives in this country. They are concerned because this year's price increase will cost a typical family about \$1,260 more per year in gasoline expenditures at current prices, or about \$100 more each time the monthly gasoline credit card statement arrives in the mail. AAA calculates this increase on the assumption that the average vehicle consumes 550 gallons of gasoline each year, as reported by the Federal Highway Administration, and the average household owns more than two vehicles--actually about 2.1 vehicles per household. An extra \$100 per month may not sound much like much to some people, but it is helpful to remember that an estimated 50 percent of American families say they always or frequently live pay check to pay check, according to my colleagues here from the Consumer Federation of America. And the median household income in the United States is only \$45,000 per year. So with these realities in mind, it is easy to understand

why a sharp unexpected hike in fuel prices can be a threatening financial setback for many citizens.

Part of the focus of today's hearing is to discuss what else the Federal government might do to help rein in the price of gasoline or help offset its impact on motorists, and AAA has a few ideas that we would like to share with you. America's energy woes are complex and far reaching. The gasoline price volatility consumers are experiencing at the pump is a result of the escalating price of world crude oil; rapidly increasing worldwide demand for energy; America's growing insecurity as the world's largest importer of oil and gasoline. Experts say the weakening of the dollar in response to our large trade and budget deficits may also be playing a role in the price of oil.

On the domestic side and clearly of our own doing, there is price volatility spawned by the reliance in some markets on a variety of fuel blends to serve clean air or local economic goals. America may not be able to control the world price of crude oil or influence demand in other countries, but we can clearly exercise more influence over our own destiny. But to do so will require leadership and action by the Federal government, as well as active participation by consumers and business leaders.

In the area of energy demand and especially demand for gasoline, more can and must be done to encourage conservation. Motorists must reduce consumption by using the most fuel-efficient cars, avoiding unnecessary trips, maintaining their vehicles, driving gently, car pooling, and using public transportation when necessary. And these are all tactics and techniques that we have been talking to our members about for many years.

As previously stated, all consumers do not have the same economic incentives to do more with less, and actually rising prices hit hardest at those at the lowest end of the income scale, and do not therefore constitute a workable fuel conservation or air quality improvement program, in our opinion. In fact, fuel economy of the total fleet in the United States has been stuck at about 24 miles per gallon for at least the last 10 years. So clearly, even though prices are going up, consumers have not made a major switch in the choice of vehicle selection when they enter the new car showroom.

AAA believes the Nation, industry, and government must commit to achieving higher fuel economy standards on all vehicles. Congress should clearly clarify that the Administration has the authority to raise fuel economy standards for passenger vehicles. Once that authority is granted, the Administration should exercise the authority so that real gains are achieved in fuel efficiency without compromising safety.

In the area of energy security, a previous generation of Americans was wise to invest in a Strategic Petroleum Reserve of the United States. It has somewhat lessened the dangers of an abrupt disruption of oil imports. Unfortunately, the same cannot be said with regard to gasoline.

Hurricanes Katrina and Rita have taught us that the United States needs a cushion of available fuel in times of emergency, especially now that the Nation imports more than 10 percent of its refined products from offshore. AAA believes Congress and the Administration should explore measures that would enable a minimum level of mandatory refined product inventories to be available in an emergency. Such a system exists in Europe and actually was able to provide critical gasoline to the United States during production shortfalls that occurred following last year's hurricanes. Should similar or worse disasters occur in the future, our ability to immediately move gasoline to areas that need it will again prove critical to people and the economy. And actually, I am with AAA's national office, which is in Florida, and the situation hits close to home. Both last year and the year before, we had local gasoline stations without fuel in the neighborhood of our national office.

In the area of boutique and biofuels, a much more coordinated approach is needed between the Federal and State governments and all the many industries affected by changes in the way we make gasoline. Industries that are forced to frequently change the composition of their products, or make specialty products for small markets, lose efficiency and incur costs from a variety of causes. These costs are understandably passed to consumers, a process that becomes especially easy when the industry involved is operating with a minimum of spare capacity and very low inventories. In our opinion, such a situation invites speculation of the price of that commodity, further driving up costs to consumers.

While this is an extremely complex problem, AAA encourages Federal and State officials to reach agreement on the use of a smaller number of fuel blends that will meet or exceed our clear air goals and be used as widely as possible. As these transitions are made, more careful attention must be paid to the implementation process by Federal and State agencies. For example, the transition between MTBE and ethanol seems to have resulted in temporary fuel shortages here on the East Coast and appears to be one of the contributing factors to today's high fuel prices. That type of experience should not be repeated.

As for the value of the dollar and its implications for the global price of oil, AAA leaves that to others that are more qualified to comment. However, we think it is important that Congress and the White House resist measures to excessively subsidize fuels to make it cheaper for Americans while driving up the Nation's indebtedness.

Thank you again, Mr. Chairman, for allowing AAA to address the distinguished committee.

[The prepared statement of Geoff Sundstrom follows:]

PREPARED STATEMENT OF GEOFF SUNDSTROM, DIRECTOR OF PUBLIC RELATIONS,
AMERICAN AUTOMOBILE ASSOCIATION

#### Introduction

AAA is the largest motorist organization in North America with almost 50 million members in the U.S. and Canada. AAA members drive approximately 25 percent of all the motor vehicles in operation in this country. We estimate they will purchase approximately 33 billion gallons of gasoline this year and at current prices will spend an estimated \$96.4 billion on gasoline.

### **Impact on Consumer**

Since the beginning of 2006, the national average price of self-serve regular unleaded gasoline has jumped from \$1.78 per gallon to \$2.92 per gallon: a whopping increase of \$1.14 per gallon. This year's price increase will cost a typical family about \$1,260 more per year in gasoline expenditures, or about \$100 more each time the monthly gasoline credit card statement arrives in the mail.

#### Time to exercise more control over our own destiny

- 1. Motorists must reduce consumption. AAA will continue to educate the public on steps they can take to drive more efficiently.
- 2. AAA believes the nation industry and government must commit to achieving higher fuel economy standards on all vehicles.
- 3. Government should work with the private sector to develop alternative fuel and vehicle programs.
- 4. AAA believes that Congress and the Administration should explore measures that would enable a minimum level of mandatory refined product of gasoline inventories. Such a system exists in Europe and was able to provide critical gasoline to the U.S. during production shortfalls that occurred following last year's hurricanes. Should similar or worse disasters occur in the future, our ability to immediately move gasoline to areas that need it will again be critical.
- 5. More planning must be done to ensure fuel is available during evacuations, in the immediate aftermath of storms or from other widespread damage, and in areas farremoved from a disaster site that might lose access to energy resources.
- 6. AAA encourages federal and state officials to reach agreement on the use of a smaller number of fuel blends that will meet or exceed our clean air goals and be as widely used as possible.

Mr. Chairman: My name is Geoff Sundstrom, and I am the American Automobile Association's Director of Public Affairs. I am AAA's primary spokesperson on motor fuel issues and have oversight responsibility for AAA's widely-sourced Fuel Gauge Report Web site which tracks national, state and local fuel prices each day. I also work with local AAA clubs on fuel price inquiries from members and the media in your home districts.

AAA appreciates your invitation to appear before the Energy and Commerce Committee to discuss the rising price of gasoline. As you may know, AAA is the largest motorist organization in North America with nearly 50 million members in the United States and Canada. Our members drive approximately 25 percent of all the motor vehicles in operation in this country. Using figures from the U.S. Department of Transportation, we estimate they will purchase approximately 33 billion gallons of gasoline this year and at current prices will spend an estimated \$96.4 billion on gasoline.

Unlike others that testify on this issue, AAA has no involvement in the regulation, refining, shipping, blending or sale of gasoline. We represent the end-users of this increasingly contentious, yet completely indispensable product. Our members are your constituents and as you know, they are very concerned about whether gasoline is going to remain readily available at a reasonable cost in the United States, or if we are slowly moving toward an era of much higher prices with even less reliable supplies of fuel.

After Hurricane Katrina ravaged New Orleans and the Gulf Coast, Americans paid the highest prices ever for a gallon of gasoline in this country: an average of \$3.05 per gallon on Labor Day Monday of last year.

As frustrating and unpleasant as that experience was, the public clearly understood that a dramatic natural disaster had befallen the southeastern United States. They heard and read that the storm harmed vital components of our energy infrastructure. And while fuel prices were exceptionally high, it was a common belief that the situation would be temporary and that gas prices would come back down.

Since the beginning of 2006, however, the national average price of self-serve regular unleaded gasoline has jumped from \$1.78 per gallon to \$2.92 per gallon; a whopping increase of \$1.14 per gallon. With hurricane season around the corner, and because fuel prices now seem to be rising significantly higher with each passing year, many motorists are alarmed that rising gas prices have become a permanent part of our lives in this country.

They are concerned because this year's price increase will cost a typical family about \$1,260 more per year in gasoline expenditures, or about \$100 more each time the monthly gasoline credit card statement arrives in the mail. AAA calculates this increase on the assumption that the average vehicle consumes 550 gallons of gasoline each year as reported by the Federal Highway Administration and the average household owns more than two vehicles.

An extra hundred dollars per month may not sound like much to some people, but it is helpful to remember that an estimated 50 percent of American families say they always or frequently live paycheck to paycheck, according to research by the Consumer Federation of America, and the median household income in the United States is \$45,000 per year, according to the U.S. Census Bureau. With these realities in mind, it is easier understand why a sharp, unexpected hike in fuel prices can be a threatening financial setback for many citizens.

Of course, pain at the pump is not felt equally. It depends on where you are on the economic ladder. If you are among the sizeable group that can readily afford a large, luxury vehicle that may not be especially fuel-efficient, the high price of fuel is mostly an annoyance.

Or, if you are an urban dweller with access to mass transit, and one who rarely if ever drives a car, gas prices may be little more than an abstraction. But for most of America's 200 million licensed drivers, high gas prices are a real problem.

Part of the focus of today's hearing is to discuss what else the Federal government might do to help reign in the price of gasoline or help offset its impact on motorists. AAA has a few ideas to share with you.

The energy problems consumers are experiencing today will not be solved overnight. Although our association has worked for many years to encourage fuel conservation by motorists and has provided members and the public with helpful advice

for doing so, the magnitude of the issues before us require an increase in thoughtful leadership from federal and state lawmakers.

America's energy woes are complex and far reaching. The gasoline price volatility consumers are experiencing at the pump is the result of the escalating price of world crude oil, rapidly increasing world-wide demand for energy and America's growing insecurity as the world's largest importer of oil and gasoline. Experts say the weakening of the dollar in response to our large trade and budget deficits may also be playing a significant role. On the domestic side – and clearly of our own doing – there is price volatility spawned by the reliance in some markets on a variety of fuel blends to serve clean air or economic goals.

America may not be able to control the world price of crude oil or influence demand in other countries. But, we can exercise more influence over our own destiny. But, to do so, will require leadership and action by the federal government, as well as active participation by consumers and business leaders.

In the area of energy demand and especially demand for gasoline, more can and must be done to encourage conservation. Motorists must reduce consumption by using their most fuel efficient car, avoiding unnecessary trips, maintaining their vehicles, driving "gently" and carpooling or using public transportation whenever possible. We should avoid the impulse to horde gas or constantly top off tanks. Even in the best of times there is not enough fuel in the system to fill every car and truck to the top of their fuel gauge.

As previously stated, all consumers do not have the same economic incentives to do more with less. Inexorably, rising prices hit hardest those at the lowest end of the income scale, and do not therefore constitute a workable fuel conservation or air quality improvement program. AAA believes the nation – industry and government – must commit to achieving higher fuel economy standards on all vehicles. Congress should clarify that the Administration has the authority to raise fuel economy standards for passenger vehicles. Once that authority is granted, the Administration should exercise the authority so that real gains are achieved in fuel efficiency without compromising safety.

Likewise, government should continue to work with the private sector in developing alternative fuel and vehicle programs.

In the area of energy security, a previous generation of Americans were wise to invest in a strategic petroleum reserve for the United States that has somewhat lessened the dangers of an abrupt disruption of oil imports. Unfortunately the same can not be said with regard to gasoline. Hurricanes Katrina and Rita have taught us the United States needs a cushion of available gasoline in times of emergency, especially now that the nation imports more than 10 percent of its refined products from offshore. AAA believes Congress and the Administration should explore measures that would enable a minimum level of mandatory refined product inventories. Such a system exists in Europe and was able to provide critical gasoline to the United States during production shortfalls that occurred following last year's hurricanes. Should similar or worse disasters occur in the future, our ability to immediately move gasoline to areas that need it will again prove critical to people and the economy.

At present, AAA is concerned that the level of preparedness based on experiences from last summer's hurricane season have not resulted in meaningful short- and long-term action to address fuel availability. More planning must be done to ensure fuel is available during evacuations, in the immediate aftermath of storms or from other widespread damage, and in areas far-removed from a disaster site that might lose access to energy resources as a consequence. Electricity generating equipment needs to be available at gas stations, for example, so fuel can be dispensed when power lines are down.

In the area of boutique and bio-fuels, a much more coordinated approach is needed between the federal and state governments, and all of the many industries affected by changes in the way we make gasoline. Industries that are forced to frequently change the composition of their products, or make specialty products for small markets, lose efficiency and incur increased costs from a variety of causes that include raw materials, labor, maintenance, storage, transportation, research and regulatory compliance. Those costs are understandably passed to consumers, a process that becomes especially easy when the industry involved is operating with a minimum of spare capacity and low inventories. Such a situation also invites speculation in the price of the commodity, further driving up costs to consumers.

While this is an extremely complex problem and there are no simple solutions, AAA encourages federal and state officials to reach agreement on the use of a smaller number of fuel blends that will meet or exceed our clean air goals and be as widely used as possible. As these transitions are made, more careful attention must be paid to the implementation process by federal and state agencies. Significant investments have already been made in boutique fuels, and untangling this apparatus will require careful oversight. For example, the transition between MTBE and ethanol seems to have resulted in temporary fuel shortages in some locations and appears to be one of the contributors to today's high fuel prices. That type of experience must not be repeated.

As for the value of the dollar and its implications for the global price of oil, AAA leaves that topic to others who are much more qualified to comment. It is important for Congress and the White House to resist measures that would excessively subsidize energy to make it cheaper for Americans while driving up the nation's indebtedness.

Thank you again Mr. Chairman for allowing AAA to address this distinguished Committee.

CHAIRMAN BARTON. We thank you. We now welcome Dr. Cooper, and your testimony is in the record and you are recognized for 8 minutes to elaborate on it.

DR. COOPER. Thank you, Mr. Chairman. I appreciate the opportunity to testify, particularly after this morning, since I will address specifically many of the questions that were raised. I would like to say the same facts, different story. I believe the lack of competition, capacity, and mismanagement of short-term supplies are at the core of increasing gasoline prices, and this is true of the global crude market and the domestic refining market.

In recent years a frenzy of trading in energy commodity markets has added to the upward spiral. If this were a free market, if this were just supply and demand, there would be 15 million barrels a day more of production capacity in the crude market and at least three to five million barrels a day more for refining capacity in the domestic market. These are not decisions that are made according to simple economic supply and demand forces. The gasoline market is rigged. It is rigged against the consumer and we simply cannot allow political and strategic behaviors to run the price up. It would be a buck 50 if this were really a supply and demand market. We simply cannot allow these decisions to run the price up and then tell consumers to pay the price.

In the past 15 years the petroleum products supplied in the U.S. market has increased twice as fast as refining capacity. Gasoline consumption has increased over two and a half times as fast as refining capacity, and while gasoline consumption was increasing by about 20 percent, the amount of gasoline and blending components in storage decreased by 6 percent. Self-sufficiency requires substantial spare capacity. We are not short one to two million barrels a day of capacity, we are short five to six million barrels a day, if you look at the spare capacity in truly competitive industries.

The tightening of the domestic gasoline market was a natural result and the intended purpose of the merger wave that took place in the 1992. ExxonMobil, Chevron Texaco, ConocoPhilips Tosco Unocal, BP Amoco Arco. There are four where there used to be eleven. As a result of that merger wave, four out of five regional refining markets and 47 out of 50 wholesale gasoline markets in the United States are concentrated by the Department of Justice's guidelines for measuring markets.

With market power overpriced, oil companies have raised the domestic spread; that is a little bit bigger than the crack spread we heard about this morning, mostly made up of the crack spread. They have raised that domestic spread by over 30 cents per gallon since the late 1990s. Five years running, the return on equity earned by the major oil companies has exceeded the Standard and Poor's industrials. That had not happened in the previous 30 years. The last two years have set new records. Using the S and P industrials as a base, we estimate that in the past 6 years they have generated excess profits of over \$100 billion.

The cash flow in the industry for the large companies exceeds the growth in capital expenditures by more than \$100 billion. The industry is piling up cash at unprecedented rates. The three American majors alone increased their cash on hand by \$30 billion, their total current assets by \$67 billion and bought back \$35 billion of their outstanding stock. We know where the excess profits have gone. They are sitting in the bank accounts of the major oil companies. The domestic refining net income has increased by \$23 billion since 2002. That is why the crack spread has increased. Yes, there are some costs there, but unequivocally, it has become a profit center for the oil companies.

Now, things have gotten so bad in the domestic market that even the DOE has recently recognized that the upward pressure placed on the gasoline market by tight conditions here may, in fact, be pulling up the world price of crude. Let us be clear. The U.S. is by far the largest gasoline market in the world. When we watch when a political entity like OPEC watches the domestic spread go up and up, when they watch the profits of oil companies go up and up, they understand that there is more consumer surplus, more rent to be extracted from consumers. And

so the price of crude may, in fact, be chasing the price of gasoline up in the United States.

And to make matters worse, the financial markets have experienced a massive increase in volume; \$10 billion a month for the last 40 months. A massive increase in volatility, a massive increase in risk. Some people estimate that as much as 20 percent of the price of oil traded in that market, it has to do with the risk volume hedge premium. That works out to 30 cents a gallon. Interestingly, we have the question raised about West Texas Intermediate and why that price seems to have increased much more than the price of crude. In point of fact, refiners don't pay West Texas Intermediate spot price for the crude they acquire, they pay a refiner acquisition cost and the EIA should not use West Texas Intermediate to calculate the crack spread. They ought to use the actual refiner acquisition cost of crude.

I would urge you to tell them to do that and show you what has happened to the spread, because in the last 5 or 6 years West Texas Intermediate has lost touch with the physical fundamentals in the market. That difference has increased, a study we did last year and we put in earlier this year on natural gas, suggests how that can operate. More money, ten, hundreds of billions of dollars are chasing the same amount of physical commodities in these markets. And frankly, when I went to college, they used to tell me too much money chasing too few goods is a prescription for inflation. That is what is happening in these financial markets.

There are obviously no short-term solutions. We wish you would have started a real long-term solution 5 years ago, 6 years ago when we first testified. In fact, we would be in the mid-term, by economic standards, if we had started. So we think that policymakers really have to look at the fundamental structure of this industry. You cannot be distracted by the excuse du jour that you get each spring as these prices go up. We have been through boutique fuels, through ethanol switch, through low storage to a refinery fire here, a pipeline outage there, there is always an excuse to explain why prices run up, but the underlying problem is an infrastructure, an industry that is not resilient, has no excess capacity, and frankly, as you heard today, the oil industry will not build sufficient excess capacity to put down pressure on price.

You are going to have to adopt public policies that get that job done. They have made it clear; they have shown for 10 years they won't. In the short term, we think we need a strategic refinery reserve. We think we need a strategic product reserve. Last fall when the President announced that our European allies were going to send us more product, where were they getting it? They were getting it from their strategic product reserves. We don't have one. We need anti-trust authorities that

worry about unilateral actions that increase prices. Market forces are so weak in this sector that you don't have to collude to raise prices. You raise your price, you look over your shoulder, you know what your fellow members of the industry are going to do. There are so few of them, they are easy to monitor and you can raise prices by unilateral action.

We need commodity market regulators who look at all markets. Yes, contracts are traded. The over-the-counter market is not regulated; it needs to be regulated. More changes hands there than on the regulated exchanges. We need joint Federal-State task forces that look at this industry. We need more eyeballs from different perspectives working together to look at these industries. The Feds alone have not done the job that needs to be done.

In the long term, we really do have to address fundamentals and in fact, we have to rapidly increase our fuel efficiency. Yesterday we put out a report entitled "50 by 2030." The idea was simple. We need to get to 50 MPG by 2030 and the analysis is straightforward. A family that walks into an auto dealership today typically takes out a 5 year auto loan. They can buy a 40 plus mile per gallon car, spend \$4,000 more and that will increase their auto loan payment. But in fact, the gasoline savings at \$3 a gallon will offset that entirely. It is cash flow neutral.

Now is the time to dramatically increase the target we have for fuel efficiency. And finally, we need to expand our research, development, production, and distribution of biofuels. We will need liquid fuels, no matter how efficient our cars get and that is where we need to find them. Thank you, Mr. Chairman.

[The prepared statement of Dr. Mark Cooper follows:]

PREPARED STATEMENT OF DR. MARK COOPER, RESEARCH DIRECTOR, CONSUMER FEDERATION OF AMERICA

# Mr. Chairman and Members of the Committee,

My name is Dr. Mark Cooper. I am Director of Research at the Consumer Federation of America (CFA). I appear today on behalf of CFA and Consumers Union. The Consumer Federation of America (CFA) is a non-profit association of 300 proconsumer groups, which was founded in 1968 to advance the consumer interest through advocacy and education. Consumers Union is the independent, non-profit publisher of *Consumer Reports*.

I greatly appreciate the opportunity to appear before you today to discuss the problem of rising gasoline prices and supply conditions.

# The Impact of Rising Gasoline Prices

The American consumer is reacting to \$3.00 per gallon gasoline prices differently now than they did last fall when I testified before the Committee about record high prices. At that time, the immediate cause was obvious, the hurricanes in the Gulf. Although, I raised concerns that price increases were unjustified and reflected

fundamental problems in the industry. Profits soared last year, affirming the suspicions by many that oil the companies were exploiting severe market conditions.

Today's gasoline prices highlight fundamental problems in the industry – a lack of competition that enables oil companies to exploit a tight market that they have created and preserved through strategic underinvestment and mismanagement. The prospect of sustained high prices at these levels is alarming to the average American household. If gas prices average \$2.75 per gallon over the course of this year, the typical family household will experience an increase of well over \$1,000 to their annual gasoline bill compared to the late 1990s.

# **Fundamental Flaws in Market Structure**

We have been pointing out what is wrong with this market for five years. Record high prices and profits today reflect a six-year trend in rising gas prices for consumers. The oil industry attributes this trend to rising crude oil prices and a string of supply disruptions in the market. A closer look at the structure and function of the oil industry and the economic forces at work, reveals a market in which the forces of supply and demand are too weak to prevent abuse of consumers. I submit for the record our study from 2004, which discussed this history in great detail.

There is not sufficient competition on the supply-side to force producers to expand capacity and alleviate pressures on prices. Demand is so inelastic that, when prices are increased, consumers cannot cut back sufficiently. Having kept markets tight and eliminated competition, the oil companies can exploit any excuse to drive prices and profits up.

To better understand what is going on with gas prices, we must look back over the last decade and chronicle the mergers that swept through the industry eliminating competition and resulting in refinery closings and reductions in storage of product, coupled with the long term refusals to build new refineries. I need only read the names of the major oil companies to remind you of the results – ExxonMobil, Chevron Texaco, ConocoPhilips Tosco Unocal, BP Amoco Arco. There are four, where there used to be eleven. As a result of that merger wave, four out of the five regional refining markets and 47 out of 50 state wholesale gasoline markets are concentrated.

The antitrust authorities will say they have not colluded. They don't have to. The industry has become so concentrated, the capacity has become so restricted, the barriers to entry so large, and it is so difficult for Americans to cut back on demand (economists say demand is inelastic), in short market forces in this industry are so weak, that they do not have to collude to raise the price level. Each company acts individually and knows full well that its brethren will act in a parallel way.

The industry will tell you that existing refineries have expanded, but clearly not enough to build the spare capacity to put downward pressures on price. They choose to keep so little spare capacities that they cannot even do spring cleaning without price run ups. They do not fear running on short supply because there is little competition to steal their customers. The industry has gained market power over price by strategic underinvestment in refinery capacity, just as OPEC has set the conditions for increases in the global cost of crude by restricting the addition of production capacity.

# **Excess Profits**

Last year the oil companies earned more income than in the five years between 1995 and 1999. More importantly, four of the five highest years for profit in the oil industry since the Arab oil embargo of 1973 have occurred in the past six years. I have submitted for the record our study of oil industry profits over the past two decades, which demonstrates over \$100 billion dollars of excess profits in the 2000 to 2005 period. We arrived at that estimate by comparing the return on equity of the oil companies to the Standard and Poor's industrials. We corroborated it with an examination of the huge

cash flow that they enjoyed, which is not being reinvested in the industry, since net new investment was a small fraction of net income over the 2000-2005 period. Free cash flow is piling up in huge masses of current assets and stock repurchases.

Crude prices have gone up and so has the domestic spread and refiner margins. Interestingly, the net income the large oil companies earn on their downstream operations – predominately refining but also marketing – in the U.S. has increased by almost 23 billion dollars since 2002 compared to the increase in net income by the oil company's foreign downstream operations, which have gone up by only about 7 billion dollars.

The most obvious indicator that market forces are working against consumers can be seen in the "Domestic Spread" over the past six years. The domestic spread is the difference between the refiner acquisition cost of crude oil and the pump price, net of taxes. When we subtract taxes and crude costs from the pump price, we isolate the share that domestic refining and marketing take in the final price. The bulk of this is for refining. In the first quarter of 2006, it was over 30 cents per gallon above the historic average. In April 2006, even before the dramatic price increases of April, it was about 40 cents per gallon higher than the average.

The evidence is quite clear that rapid consolidation within the industry has changed the market fundamentals and behavior patterns. They simply do not compete on price to increase market share. They do not worry about running out of product, because they know they can simply raise the price of gas. They closed refineries for business reasons and refuse to build new ones for business reasons.

# **Pulling Up the Price of Crude**

This huge increase in domestic spread and refiner margins may have another effect. Things have gotten so bad in the U.S. gasoline market that even the Energy Information Administration, in its most recent report *This Week in Petroleum*, recognizes that the tight U.S. gasoline market may be "pulling up" the price of crude. After all, the U.S. is the largest single oil consumer in the world and the largest gasoline market by far, accounting for over a quarter of the world-wide total. When the domestic spread and refining profits go up, it signals that there is more consumer surplus – more rent – to be extracted from the American consumer.

In recent years the upward pressure on prices and the demonstration of more rent to be extracted has been reinforced by commodity markets. The *New York Times* recently (April 29, 2006) noted in an article headlined, "Trading Frenzy Adds to Jump in Price of Oil," that some analysts believe a huge increase in trading volume, volatility and risk are adding as much as 20 percent to the price of oil. That works out to about 30 cents per gallon. I have submitted for the record a report I prepared earlier this spring for four Mid-West Attorneys General on the impact of commodity market trading on natural gas prices. Therein I describe in detail the same factors – a continual increase in volume, volatility and risk – that are affecting both the crude oil and natural gas markets.

### Recommendations

There are no short-term solutions, but I must remind you that the American gasoline consumer has been afflicted by this market for six years. If we had started working on effective solutions six years ago, we could be well into the mid-term of a long-term policy shift. Policy makers are going to have to reform the fundamental structure of this industry and change the underlying dynamics.

To address short-term spikes in prices, we recommend:

 Increased oil industry revenue funneled back into expanding our refining capacity.

- We need a strategic refinery reserve and a strategic product reserve that are dedicated to ensuring we have excess capacity sufficient to discipline pricing abuse.
- Setting requirements that guarantee an increase in refining and storage capacity
  to deal with the industry's failure to build capacity and keep adequate stocks on
  hand by creating strategic refinery and product reserves.
- Mechanisms that prevent pricing abuse in the energy markets including formation of a joint task force of federal and state Attorney Generals to monitor the structure, conduct and performance of gasoline markets, with an emphasis on unilateral actions that raise price.

To address long term fundamentals change the supply-demand balance in this sector, we recommend:

- Accelerating the day when we will use less oil by setting aggressive, concrete targets for reducing America's oil consumption. Specifically, we need concrete steps for reducing fuel consumption through aggressive, targeted improvements to vehicle fuel efficiency standards.
- A national policy that promotes the research, production and use of biofuels.

Hopefully, the current round of price spikes will convince policy makers to take steps to build a better future for American consumers by addressing market who's forces that are working against the American people and for the interests of a few.

Again, thank you for the opportunity to appear before you today. I look forward to working with the committee on policies that can solve the nation's oil problem.

CHAIRMAN BARTON. Thank you, Mr. Cooper. We now want to hear from Mr. Wilkins on behalf of the florists and given that it is Mothers Day coming up, thank you for taking time to come talk to us.

MR. WILKINS. Thank you. Mr. Chairman and members of the committee, the Society of American Florists and I greatly appreciate the opportunity to present testimony today on behalf of the floral industry. Gasoline prices, as well as all fuel prices are very important to our industry, maybe even more so than some of the other smaller businesses, as I will try to describe here today. And with your permission, I will submit my written statement for the hearing record and just summarize it here.

As a way of an introduction, I am the Executive Vice President and one of the second generation family owners of the Delaware Valley Floral Group, which is a floral distribution, logistics, and transportation provider which was founded by my father in 1959. We work hard to remain a family business and we have an active third generation in the business today. We employ over 500 people. One of our divisions is Delaware Wholesale Florist. We purchase and import floral products, including fresh cut flowers, cut greens, potted plants, and hard goods, which are florist supplies, from growers, manufacturers, and importers both domestically as well as worldwide.

We then sell these products to retail florists, mass marketers, and other retail outlets. They, in turn, resell them as is or convert them to a finished product for the end consumer. It is important to note that other than labor cost, perhaps no single factor plays a bigger role in the bottom line of the floral businesses than does the cost of fuel. Fuel costs impact every step in the market chain, as I would like to briefly describe.

It is appropriate, though, to mention that, as you actually just said, that this week is, for the wholesale florists or really for the florist industry, one of the busiest weeks of the year. And I would be really remiss if I didn't remind you all to buy flowers for your mother and your wives and your daughters, if they happen to be mothers, as well. But when you do that, let us stop and think about something. We estimate that up to 50 percent of the cost of those flowers could be attributed to transportation cost. Our industry has very little ability to pass through added cost to our customers.

Quickly, here is how the market chain works. A large percentage of cut flowers sold in the U.S. are grown in South America, Europe, Africa, or Asia. Our domestic production, which is also important to us, comes primarily from California, Florida, Washington, Hawaii, and Oregon. Obviously, all fuel costs, including gasoline, will play a big role in getting flowers from those places to you, the end consumer. As an example, 32,500 boxes of flowers come in by air through the Port of Miami every day. They are unloaded from planes and go through customs. Then brokers move them again by motorized transport and they are reloaded onto other planes or trucks for shipments to importers' of our own refrigerated tractor trailers from Miami to New Jersey. And if they are grown in the U.S., they would come from say, California all the way to New Jersey, usually by tractor trailer, sometimes by air, but when by truck it is a 36 hour, nonstop run by a team of tractor trailer drivers. From our warehouses in New Jersey, the flowers are shipped via our fleet of 101 delivery trucks to our retail customers. And we are not done yet. From the retailer, they are usually delivered right to the customer's door, be it their homes, offices, to churches for weddings or other special events.

The point is there are a lot of planes, trucks, and delivery vehicles involved in getting flowers from the grower to you and of course, they all use fuel: jet fuel, diesel fuel, and gasoline--all refined from oil. You will also notice that I said refrigerated trucks. Flowers are perishable products and we have to keep them cool. At Delaware Valley, our policy is to keep them at 30 to 35 degrees and to make sure that they have been kept in that range from the time they are cut at the grower until they

reach the retail florist. This is what we call the cool chain. As we all know, however, running refrigeration increases fuel cost and energy cost.

How is our industry coping with all of this? Well, back in 2004, the Society of American Florists did a survey of retail florists. At that time gasoline was \$2 per gallon. About 50 percent of the florists said gas prices were hitting their profits harder than heating prices or healthcare costs. Only 11 percent of the florists reported that they were able to increase product prices. About half said they were increasing delivery fees. Now gas is close to \$3 a gallon. These small businesses just can't cope with the continued rise in gas prices. Keep in mind that they are also facing double digit inflation in healthcare costs, rising labor costs and even things like estate tax planning costs, just to mention a few other concerns. Small businesses simply can't keep absorbing all these costs, especially when they can't fully pass them along to their customers.

At our company, we use lots of diesel fuel. In fact, we buy it in 10,000 gallon tank loads, so we do get a discount. However, we are coping with increases and unpredictability in prices which makes it not only expensive, but hard to plan ahead. Two years ago we were buying diesel fuel for a \$1.57 a gallon. Today it is \$2.74 a gallon, almost twice as much. To cope with these prices, our company is experimenting with different kinds of fuel efficient trucks, but for us that means more capital investment. We are encouraging our customers to place bigger orders less often. We are using computer routing software to make deliveries more efficient. Although we try to be as efficient as possible, we still have to impose higher delivery charges on our retail customers and our trucking division currently imposes a 22 percent fuel surcharge on its customers.

I mentioned the floral industry has a limited ability to pay us through additional costs to our customers and why is that? Flowers are a discretionary purchase. We compete with wine and chocolate and teddy bears and jewelry and even dinners at restaurants. Almost any kind of gift that you can think of is a competitor of flowers. So if the price of flowers goes up too much, we lose market share to one of the competing gift items or industries. The floral industry is working together to try and establish the kind of joint advertising that will help us to sell more flowers, but we don't want to see our efforts increase our market share only to be eaten away by higher prices at the pump.

In closing, I applaud you for holding this hearing and for having the courage to ask the questions you are asking. The U.S. needs a coherent national energy policy, but as a businessman, I am not here to recommend price controls or arbitrary government intervention. As business people, we want to keep expanding our businesses and hiring more employees. We very much appreciate the opportunity to be here

and we look forward to continuing to work with you. I would be pleased to answer questions. Thank you.

[The prepared statement of John Wilkins follows:]

PREPARED STATEMENT OF JOHN WILKINS, EXECUTIVE VICE-PRESIDENT & CIO, DELAWARE VALLEY WHOLESALE FLORISTS, ON BEHALF OF SOCIETY OF AMERICAN FLORISTS

# SUMMARY OF TESTIMONY SOCIETY OF AMERICAN FLORISTS

- The floral industry growers, wholesalers, transporters, importers, distributors, and retail florists – represents a major component of the U.S. economy: \$19.5 billion, at retail
- All of the businesses in that market chain are significantly impacted by the price of fuel. Other than labor costs, perhaps no single factor has more power to impact the bottom line of floral businesses than the cost of fuel.
- The increases, and the unpredictability of changes, in fuel costs combines with other uncertainties and changes impacting the industry (increasing globalization of trade, growth of e-commerce and the Internet, other economic changes) to challenge the floral industry, just as those changes impact other small businesses in our economy.
- Up to an estimated 50 percent of the cost of flowers is attributable to transportation costs.
- Fuel costs impact every step of the market chain. Imported flowers travel by air transport, which is significantly affected by the price of jet fuel. At the port, motor transport moves flowers through Customs and then back onto planes, or onto refrigerated trucks, for shipment to wholesalers. Domestic growers also must ship flowers either by truck or by air. Wholesalers then must ship flowers to retail floral shops, supermarkets, and other customers. Finally, florists usually deliver floral arrangements directly to the consumer's home, office, or event location. Each step in the market chain incurs transportation costs, which are significantly impacted by fuel prices.
- ♦ Adding to transportation and storage costs, flowers are a perishable product, and must be shipped and stored under refrigeration. Growers and importers precool their products before shipping and require that trucks be precooled and stay cooled during transport. Wholesale and retail florists also must maintain and ship product under refrigeration. Running trucks and delivery vans under refrigeration adds to fuel consumption and, therefore, to cost of transportation.
- The industry is assessing fuel surcharges, working to achieve better efficiency in delivery, and trying in other ways to counter increases in fuel prices. However, there is a limit to which fuel costs can increase without driving profits to zero – or into losses.
- Flowers are a discretionary purchase, competing for the consumer's dollar against other gift items (wine, chocolate, etc.). Therefore, increases in the cost of fuel cannot be fully passed through to the consumer without decreasing overall sales.
- ◆ The U.S. needs a coherent energy policy, that will help our economy and our businesses, large and small, be able to survive and deal with energy costs as a predictable cost of doing business.

Mr. Chairman and distinguished members of the Committee, the Society of American Florists appreciates the opportunity to present this testimony, discussing a topic very important to the floral industry, as it is to other segments of our economy: the price of fuel.

I am John Wilkins, the Executive Vice President, and one of the second-generation family owners of the Delaware Valley Floral Group. I have served on the Board of Directors of the Society of American Florists, and I am also a past president of the Wholesale Florist and Florist Supplier Association.

The Delaware Valley Floral Group is now in its third generation. One of our divisions is Delaware Valley Wholesale Florist, which was founded by my father in 1959. Our headquarters is in Sewell, New Jersey, and we have locations in Edison, New Jersey; Baltimore, Maryland; and Miami, Florida. Another one of our divisions, Flower Transfer, provides transportation and logistical services to the floral industry, and operates a fleet of tractor-trailers.

The Society of American Florists (SAF) is the national trade association representing the entire floral industry, a \$19.5 billion component, at retail, of the U.S. economy. SAF membership includes some 10,000 small businesses: growers, wholesalers, retailers, importers, suppliers, educators, and related organizations, located in communities nationwide and abroad. It encompasses a market chain including growers, wholesalers, transporters, importers, distributors, and retail stores – all of whom are impacted by the price of fuel. The industry produces and sells cut flowers and foliage, potted foliage plants, potted flowering plants, bedding plants, and florist supplies.

U.S. Department of Commerce and Department of Agriculture figures show that there are over 10,000 floriculture growers in the U.S., over 1,000 wholesalers, and over 22,000 retail florists. More than 350,000 people are employed in commercial greenhouses, wholesale florists and retail florists. Despite the industry's large size and economic strength, it is made up largely of small, family-owned businesses. Many floriculture growers, wholesalers and retailers own businesses which have been in their families for several generations.

As a wholesale distributor and logistics provider, Delaware Valley purchases floral products – fresh-cut flowers, greens, flowering and foliage plants and hard goods -- from growers, manufacturers and importers, and sells them to retail florists, supermarkets, mass marketers, and other retail outlets of flowers, greens, and floral products, who in turn resell them to the end consumer. As a result of the increasing globalization of trade, the growth of e-commerce and the Internet, and changes in the U.S. and global economy, the flower industry, just like many other small businesses across America, continues to experience challenges.

# FUEL COSTS IMPACT EVERY STEP IN THE MARKET CHAIN OF THE FLORAL INDUSTRY

Other than labor costs, perhaps no single factor has more power to impact the bottom line of floral businesses than the cost of fuel. From growers to wholesalers to retailers, an increase in fuel prices can dramatically impact the bottom line. I want to talk with you more about how our industry works – the various points at which gasoline and diesel fuel, as well as jet fuel, impact the industry. I think it will help you move from the impact of fuel prices on consumers and consumer spending to the impact on businesses, employment, and our economy more generally. As I discuss the various parts of the market chain, I will talk about jet fuel, diesel fuel, and gasoline prices – all of which factor into the prices of floral product as it moves from grower to importer or wholesaler to retailer to consumer.

As you buy flowers for your mothers, or wives, or daughters, this coming weekend in celebration of Mother's Day, I am estimating that up to 50 percent of the cost of the flowers is attributable to transportation costs. That's not counting the percentage that might be attributable to other fuel prices —heat for greenhouses and electricity for refrigeration, for example. Transportation costs alone, at a very rough estimate, account for up to 50 percent of the cost of flowers you buy.

First of all, a large percentage of the most popular cut flowers sold in the U.S. are grown overseas – in South America or in Europe – even in Africa and Asia. And our domestic production of cut flowers – which remains a very important part of the industry as well – takes place primarily in California, Florida, Washington, Hawaii and Oregon. Obviously, fuel costs to transport those flowers through the market chain to consumers are going to play a big role.

If produced in, say, Colombia, the flowers must come by air carrier, to one of the major U.S. ports – usually Miami. Depending on the country of origin, flights could come also through JFK in New York, through Los Angeles and San Francisco, through Chicago, through Houston. The cost of air transportation, obviously, is significantly affected by the price of jet fuel.

When the flowers reach the port – say, of Miami – they are unloaded from the plane and taken through U.S. Customs. After they have cleared customs, the broker then moves them -- again by truck or other motorized transport – and they are loaded either onto another plane or to refrigerated trucks, for shipment, usually to importer's warehouses or to wholesalers. From the port, the flowers are again stored under refrigeration until they are shipped to the retail florist or other outlet for sale to consumers. Taking my example, the Port of Miami alone handles 32,500 boxes of flowers every day – so these operations are large, complex – and when an increase in the price of fuel is added into each step, it has a big impact on the industry's ability to plan and to survive.

Flowers will not perform well for the consumer unless they are maintained at a cool temperature. Extreme heat can destroy flowers quickly. At the very least, it will result in a greatly reduced vase life for the consumer. Research in our industry has found that roses, for example, will last much longer if they are kept at something between 30 and 35 degrees F. during the entire time from cutting until they reach the ultimate consumer. Delaware Valley's policy is to require that all trucks maintain refrigeration within that range. Refrigeration makes truck transportation more expensive.

The process described above is also true for flowers coming from U.S. growers into the market. From California, Florida, or wherever they are grown, the product must be carried quickly, with proper refrigeration, to the wholesale and the retail customer – and finally, of course, to the ultimate consumer. Again, refrigeration is required and contributes to the fuel costs. Growers and importers precool their products before shipping. They also require that the tractor-trailer rig which carries flowers from the farm or warehouse to the wholesaler be precooled. The truck may have to sit in the yard with its engine and refrigeration running, while the trailer gets cool enough to load the flowers safely.

Next, the product moves again to one of the U.S. wholesale operations like Delaware Valley. It must be carried in refrigerated tractor-trailer rigs or by air, for example, from Miami to Philadelphia. Time is of the essence in floral transportation, so we want to get the flowers into our refrigerated warehouses and back out to our florist or other customers as quickly and safely as we can.

For our operations, once the product gets to Delaware Valley, we have a fleet of 101 refrigerated chassis-cab delivery trucks, which move floral product from our facilities to those of the retailers, supermarkets, and other customers all over the U.S.

All of the Delaware Valley trucks – the tractor-trailer rigs and the chassis-cab delivery trucks – use diesel fuel, although the trucks of many wholesalers may be using gasoline. Either way, the unpredictability of fuel prices makes business planning difficult. Two years ago, our price of diesel fuel was \$1.57/gallon. Today, it's \$2.74/gallon – that's an increase of \$1.25 over two years. (It should be noted that Delaware Valley buys diesel fuel in 10,000-gallon lots. At the pump, the price would be significantly higher.) But even though we can achieve economies of scale, the price increases will impact our business planning, and, ultimately, our ability to make a profit.

And it's more complex than that: the average diesel fuel price in 2005 was \$2.26/gallon - but in January of 2005, the price was \$1.85. The yearly average price in 2003 was \$1.29/gallon. For the business owner, you can see how difficult it is to predict what the costs are going to be and incorporate that into realistic business planning.

Once the flowers reach the florist shop, we still aren't finished with transportation costs. As you well know, florists usually deliver floral arrangements directly to your home or office – so we have yet another incremental, fuel-cost addition: here, the price of gasoline for the florist's delivery truck. The great majority of floral purchases are delivered directly to the consumer – to the home, the office, or the location of a special event.

#### HOW ARE FLORAL BUSINESSES COPING WITH INCREASED COSTS?

At the end of 2004, SAF did a survey of retail florists which showed some of the following results:

"With gasoline prices still hovering around the \$2-per-gallon mark ... almost 40 percent of recent retail florists responding say they're absorbing higher gasoline prices so far – compared to the 50 percent who reported absorbing higher prices in May. Eleven percent of recent respondents reported they've increased product prices, versus 7 percent earlier in 2004. About half of respondents reported that they have raised delivery fees to compensate for higher costs. Fee increases (per delivery) range from 50 cents to \$4. Florists reported other ways of compensating – including redesigning delivery routes, calling customers to make sure they're home before deliveries, and urging drivers to fill tanks whenever they see lower gasoline prices. About 50 percent of these respondents say gasoline prices are affecting profits more than heating prices and health-care costs. In December, 2004, at the time of this survey, the national average price per gallon of regular gas was \$1.95, about 31 percent higher than the same time the year before. The West Coast reported averages of \$2.16 per gallon and the Gulf Coast reported a lower average of \$1.84 per gallon." [SAF Press Release, December 9, 2004]

That survey was taken a year and a half ago — with prices around the \$2/gallon mark. The average retail price of a gallon of gasoline rose almost four cents across the nation during the past two weeks, according to a Lundburg Survey released last Sunday. Self-serve regular averaged about \$2.94 a gallon, and the average price of mid-grade was \$3.04/gallon. Premium hit \$3.14 a gallon, compared with \$3.10 two weeks ago. SAF is again surveying retailers to see how they are responding, in this very busy period right before Mother's Day.

I haven't touched, in this testimony, on the cost of natural gas, because it's not a topic of this hearing. Natural gas is used to heat the greenhouses in which flowers and plants must be grown in most parts of the U.S. – and natural gas prices, as you know, have also increased dramatically. Grower after grower has mentioned to us how the situation is reaching crisis proportions. Growers in the U.S. are closing or sealing off portions of their facilities, letting greenhouses lie vacant, because it's too expensive to heat them

Our industry can't continue to absorb those price increases – which impact every step of the chain, from grower to consumer. All of the costs of transportation must get pushed along and reflected in the price of the product, if our market system is to work. Yet there is a limit to which they can be passed along to the ultimate consumer.

We in the floral industry have an added wrinkle. Flowers are not a necessary purchase – they are a discretionary purchase. We compete for the consumer's dollar against things like wine, chocolate, or other gifts, even in good times – and in tighter

times, we have to compete against other choices the consumer might have for available spending – movies, college educations, vacations, and so on. The point is, there is a limit – and not a very high one – to how many costs we, as businesspeople, can pass through to the consumer. So the increases in fuel costs are tending to come out of our own profits – at every step along the chain: brokers and importers in Miami, trucking companies, airlines, growers, wholesalers and, of course, the retailer who finally sells the product to you.

Even though Americans think of flowers as an integral part of holidays – Valentine's Day, Mother's Day, Thanksgiving, Christmas – and as an integral part of formal occasions – like weddings, funerals, christenings, business banquets, and high-school proms – Americans are not high per-capita consumers of flowers when compared with our European counterparts. We in the U.S. spend about \$31 on cut flowers per capita per year, compared with \$55 in Denmark or Belgium, \$72 in Holland, or \$112 per capita in Switzerland. Our industry continues to work together on joint marketing and promotion efforts for flowers, to increase the demand. But to make those efforts work well, we have to supply good-quality, long-lasting product to the consumer when and where the consumer wants to buy it. Fuel costs are a major consideration.

To make matters worse, the traditional retailers in our industry – made up by far for the most part of small business owners, often family-owned businesses, sometimes owned by a family for three or four generations – are now under extreme pressure from the supermarkets and mass marketers. Retail flower shops are a difficult business, and retailers go out of business at a relatively high rate.

All of these incremental fuel cost increases from each segment of the market chain – fuel for air transportation, truck fuel, gas to deliver to consumers' homes and offices – add together to compound the final cost of the product, and to make business-planning very challenging. And of course the real question is whether those additional, sometimes very unpredictable costs can be passed along to the consumer or absorbed by the business without harming the business and ultimately, our economy.

What are we doing at Delaware Valley to help counter these increased costs and avoid laying off employees or downsizing our business? We have had to increase our delivery charges to our retail customers. We are imposing a 22 percent fuel surcharge over our normal rate to our transportation customers (product that, for example, we might carry for other wholesalers, product carried to mass marketers, or product carried on "back-hauls," (the return-run of an otherwise-empty tractor-trailer). At this point, most of the transportation companies are also assessing fuel surcharges.

We are a large company, and our transportation is efficient. We utilize computer tracking. We are experimenting with different types of fuel-efficient trucks. We are encouraging our customers to place fewer, but larger orders to save on transportation costs. We're doing everything we can to counter the increases in gas and other fuel prices. But we, as a company, would not be able to continue operations without imposing these fuel surcharges at this point in time. As rising fuel costs cut further and further into businesses' already low margins, the additional costs added will quickly drive profits to zero – or into losses.

## CONCLUSION

The U.S. needs a coherent energy policy: not price controls, not arbitrary government intervention – but an energy policy that will help our economy, and its businesses, large and small, be able to survive and deal with energy costs as a predictable cost of doing business.

As a business owner, we would encourage Congress and the Administration to work toward a more coherent national energy policy: for example, encouraging alternate fuel sources, encouraging more U.S. domestic production under environmentally safe

practices. Government interference in the marketplace itself is usually viewed negatively by business, of course. The law of unintended consequences often seems to follow direct government intervention. But for business owners, like me and my family, to continue to employ and provide benefits for our employees, and plan ahead for our business operations, we must be able to buy fuel at reasonable, and reasonably predictable, costs.

I very much appreciate your giving the floral industry the opportunity to present some examples of the impact of fuel costs on our industry, and our employees, nationwide.

CHAIRMAN BARTON. Thank you, Mr. Wilkins. The Chair recognizes himself for the first 5 minute question round. Mr. Cooper, your testimony is always thoughtful and on the point. I appreciate that. I have found out that crude futures on the New York Mercantile, the margin rate is set by the traders themselves; it is not a regulated rate. And currently it is somewhere between 3 and 6 cents per dollar per contract, which means for about \$300 to \$400 you can control a thousand barrel contract that is worth in today's prices, \$74,000. On the other hand, the margin requirement on a refined gasoline futures contract is over \$10,000. Would it be a good idea for the Congress or the regulators at the CFTC or the SEC to set a minimum margin requirement on crude futures by statute or regulation?

DR. COOPER. Well, I frankly think that we need to get a much better understanding of what those markets are doing to us. I mean, if you look at the growth of trading in that market, and obviously low margin requirements, there was a popular phrase way back when in a Texas company called "asset-light", "asset-light" gets you in trouble, as we have learned. So what you allow here is you allow people to commit to huge sums of financial obligations, counter party risk, with very little assets behind it and that encourages more and more trading. If you look back at these markets, the dollar value of trading for energies, they include wood there, but I don't think it is wood that is driving those numbers, has been increasing by something like \$10 billion a month every month for 40 months.

CHAIRMAN BARTON. But my question is--

DR. COOPER. Yes, and that helps. So the answer is that if you discipline people by forcing them to back their promises up with more cash, you will reduce the number of people who are--

CHAIRMAN BARTON. I had the President of IMEX in my office yesterday and he thinks it is a bad idea, obviously. He doesn't want anybody telling him how to set the margin requirement. But he does state that if the market rate requirement were to go up, there would be less speculation in the market. Now, he doesn't necessarily think that would be a good thing. His opinion is the speculators provide the crediting and they take the opposite side of every trade and that if we took the speculators out of the market, the price of gasoline would

probably go up because you would have a less liquid market. But it seems to me, to the extent there is a speculative aspect to the crude price, that making it more difficult to speculate would tend to cool off the market, which would tend to bring prices down.

DR. COOPER. The quick fee is not free, and that is the point they miss. Every time that a transaction takes place, if it is more volatile, if there is more risk, there are transaction costs, right? So every time those transactions take place, you are increasing the risk premiums. You have to pay more to get someone to actually part with a barrel of oil and over the last two or three years folks have looked at this liquidity, the increasing volatility and risk have added dramatically to the traded price of oil and we think that sets a target. The people who own the physical commodity then start to shoot at--that is one step. There are lots of other things we would like to see. I think that resides in a different committee. I may be wrong.

CHAIRMAN BARTON. We can always try.

DR. COOPER. But, you know, the over-the-counter market is unregulated. Traders don't have to report. They are less regulated than bankers, for sure. With bankers we require them to register reports, have a clean criminal record, for instance, and then we set their margin requirements. And frankly, in a certain sense, energies are more important than money to this economy and they ought to be better regulated.

CHAIRMAN BARTON. I need to ask a question of Mr. Sundstrom. I think in your testimony you indicated that you supported the creation in the United States of a refined product reserve, is that correct?

MR. SUNDSTROM. Yes, that is correct.

CHAIRMAN BARTON. Who would pay for that?

MR. SUNDSTROM. Well, ultimately, the consumer would pay for it through taxes or through increased price in the fuel, but you were just talking about volatility in the futures market. Really, our concern for a long period of time, many years, has not been so much the price of gasoline, although we are mortified that it is as high as it is now. Our concern has been the stability of the price and we think that by having a cushion of reserve gasoline in this market, particularly with the smaller number of refiners that are operating in the United States, that ought to help stabilize prices, particularly when we are faced with situations such as we have had in the last few years, the hurricanes in Florida.

CHAIRMAN BARTON. Mr. Cooper mentioned this, too. Would you just tell the domestic distributors or refiners to maintain a higher than normal inventory, like they do in Europe, or would you like to see the Government create a stockpile?

MR. SUNDSTROM. I think the most direct way to do it would be to require it of those that produce the fuel.

DR. COOPER. You have either or both. Those are the two ways to get it. You could require a percentage of your expected sales to be in storage and/or you could have a Federal stockpile to be used for other purposes or similar purposes.

CHAIRMAN BARTON. I have got about six more questions, but it is not fair to the other Members. My last question is to you, Dr. Cooper. You always give great potential solutions and I am serious. I have never heard you say anything that didn't make some sense, at least to think about doing and I am sincere, but as smart as you are, not once today did you mention any kind of a supply side component to your solution. You didn't mention drilling in ANWR, you didn't mention drilling in the OCS. Is it just anathema to the consumer groups to have a supply component to your solution matrix?

DR. COOPER. Well, I actually did mention a supply component. I talked about biofuels and alternative fuels.

CHAIRMAN BARTON. Well, I guess so. What percent of the market do you think--

DR. COOPER. Well, but the problem with that supply side solution is one, it would not have a significant impact on the price of oil. It is a mature resource base, it is not going to change the balance in the world in the long term, and above all, the same entities will control that resource that have underinvested in their capacity, that are still not treating oil, if it is worth \$50 or \$60 a barrel, so when we look at supply side, biofuels have three characteristics that we find very interesting. One, it is a different raw material. It can be corn, it can be switch grass, it may be coal. I am sure I might get a question about that. Okay, it is a different raw material.

Two, those ethanol plants compete with refineries. They expand the capacity about our ability to produce liquid fuels. And three, for most of these, it is a different set of actors, actors who are not part of the club or the game, okay? And so in the scheme of things, we think that is where we get a much bigger bang for the buck is looking at those alternatives.

CHAIRMAN BARTON. Well, thank you, sir. Mr. Boucher.

MR. BOUCHER. Well, thank you very much, Mr. Chairman. First, let me say, Dr. Cooper, that I share the Chairman's view of the quality of your testimony. I am continually impressed with your thoroughness and the fact that you research the subject completely and then make a comprehensive presentation. You have certainly done that again here this afternoon. And you have just answered my first question, which was the potential contribution on the supply side, that coal to liquid fuels can make. We heard from the Energy Information Administration this

morning that at a time when oil is priced at about \$40 per barrel, the coal conversion to liquid fuels becomes economic and EIA is projecting well above \$40 per barrel for the long term. That is bad news, generally, for gasoline consumers, but it does point to the appropriateness of making some investments now and taking such steps as to further encourage the advent of coal to liquid fuels in this market. I have some other questions for you, but let me just ask, would you like to make a brief comment about that potential?

DR. COOPER. Well, again, I have just sort of given you the reasons why we look for the alternatives and I would rather not get into picking and choosing which of those alternatives will be best.

MR. BOUCHER. That is fair enough.

DR. COOPER. I do think what we need to look at is whether there are structural impediments and critical decisions that can be made to promote the transition. So we heard a lot today about the lack of infrastructure for the ethanol fuels. The question is will the industry provide the infrastructure? If not, how do we goose that? What is the automobile industry doing about it. So I think given that these alternatives are out there, we also need to look at the balance of subsidization. There are some people who say the oil industry is heavily subsidized; some people will say it reflects a certain set of characteristics about the industry in terms of depletion allowances and so forth. So we need to think about the balance so we are not tipping the scale one way or the other.

MR. BOUCHER. Let me move to a different area. I believe you indicated that the domestic spread in the United States, the difference between what crude oil markets for and what the price at the pump is, is something on the order of 40 cents per gallon above the average. Is that number essentially correct?

DR. COOPER. Above the historic average.

MR. BOUCHER. Above the historic average. What is the historic average?

DR. COOPER. Well, if you look over the course of a year, it is about 30-35 cents and that is the difference between the crack spread was only about 20, historically. I am using the domestic spread which includes retailing. So it is about 30 or 35 cents. It has gotten a lot higher than that in the last 6 years.

MR. BOUCHER. And so that added component of 30 to 35 cents above the historic average, they would be 40 cents above the historic average. It is attributable, I am sure, to a variety of factors, but if you had to target one, what would you nominate as the most prominent factor that leads to that and to what extent does the shortage of an adequate refinery capacity in the United States contribute to it?

DR. COOPER. Well, in the report we submitted for the record, we looked at an interesting contrast. We look at the large American oil companies. They have U.S. refineries and foreign refineries. The rate of profit on the U.S. refineries has increased twice as fast as the foreign refineries in the last 5 or 6 years. The explanation for that has to be a difference in the market structure. Our market is much tighter and you heard Mr. Gruenspecht this morning talk about the fact that the European market had excess capacity because of the switch to diesel. We didn't have that capacity and so the ability to raise the profit margin here faster than abroad is a function of market structure.

MR. BOUCHER. Some have suggested that because of the restrained refinery capacity in the United States we are seeing record profits for the refiners and the fact they are realizing those record profits is largely the reason that we are not seeing the construction now of adequate refinery capacity in the United States. Maybe that is of necessity a subjective conclusion that one must reach, but my question to you would be is there any evidence that would point to that conclusion?

DR. COOPER. Well, there was evidence in the mid-90s discovered in the merger proceedings where, and you heard mention of that this morning, the corporate memo said we've got to tighten this market up, and after the mergers, refineries were closed. The market was tightened in that respect. Studies were done of the behavior of the players in that market. The Iran study I cite in my testimony, in which they discovered that refiners used to compete for market share. They would cut their prices. They used to worry about going short, but now they don't. Why? Because they know they can put the price up. So in a certain sense, the relationship between the price and the structure is always conjectural. Occasionally you will find a smoking gun in a corporate memo. Well, we got those. So at every level we have the evidence that this has hurt us. GAO did a study, as well, which said it also hurt us.

CHAIRMAN BARTON. Will the gentleman yield?

MR. BOUCHER. I will be pleased to yield.

CHAIRMAN BARTON. I think, to be fair to the refineries, and I am not defending their margins today, but in some of those time periods they were loss leaders. The refinery business, at one time in the United States, was not a profit center. It is now, that is not necessarily a bad thing that we can argue. I think your testimony about the concentration by region is worth further investigation. So I am not attacking your main point, but we need to be fair to the refiners. There was a time in this country that they were losing money and that is one of the reasons some of those mergers happened, because some of the major oil companies wanted to get out of the refinery business because they didn't think they could make any money.

DR. COOPER. And at the same time, we have to remember that a great deal of the refining capacity in this country is integrated and so where the profits are taken is a function of the transfer price. And so when the price of crude oil on the market goes to \$65, I am self-supplying 50 percent of my capacity with oil I own. My cost of binding that crude didn't go up to \$65. I could transfer that oil to my refinery at the old price because my cost didn't go up and my refinery profits would go way up. In the alternative, I could take the world oil price and then transfer that to my refineries; my profits would look smaller. So it is correct, I think, that we also need to look at these integrated companies and their overall profit.

CHAIRMAN BARTON. But isn't it true that the big, big integrated companies tended to shed their refinery systems as opposed to acquire more?

DR. COOPER. Certainly, through the 1990s and after the mergers, we closed about 50 refineries. They were a function of those mergers. Earlier we heard about the tea kettles, that was a small refiner bias. We had decided in the 1980s we wanted to have these things. We can debate whether that was a good idea, although we look back on that excess capacity industry, it cost us money. We look back on that excess capacity industry and say hey, that turned out to be a pretty consumer friendly environment, even though it raised the cost a little bit. So in fact, we can have the refining industry we want by setting the public policy and you are right, it was a thin margin business for a while in an average margin integrated company. Now it has become a pretty fat margin business in a very fat margin integrated company.

MR. BOUCHER. Mr. Chairman, if you would indulge one further question, this will be brief. Dr. Cooper, you have referenced the need for reserves. You mentioned both the need for a product reserve and the need for a refinery reserve. Mr. Dingell and I are introducing a bill tomorrow that would call for a national refinery reserve modeled on the very successful strategic petroleum reserve. My question to you is if we had a product reserve, which we don't have today, but there has been commentary from several witnesses about the appropriateness of it; if we had the product reserve, why would we also need a refinery reserve? Do we, in fact, need both?

DR. COOPER. Well, I would rather attack the problem at the refinery level. That has become the bottleneck. I think the product reserve also helps, because it is a very short term. Let us be clear. We have a really short-term problem in this industry. Americans can't stop driving. We built our country around the assumption that we are going to get in our cars and go places and so in the short term, you have got a really significant spike problem. And so it just struck me that the approach that

was taken to a strategic refinery reserve, and I use the word strategic. Let us be clear. The Strategic Petroleum Reserve is not used to discipline price, has never been used to discipline price. We envision the strategic refinery reserve and the strategic product reserve being used in that fashion and so I used to say about the Strategic Petroleum Reserve make it so big that no politician would dare not to use it when things got bad. It is clearly not big enough yet, by that standard. But the strategic refinery reserve gives you a 60, 90-day and out flexibility; a product reserve is that really short-term response in a very volatile market.

MR. BOUCHER. Thank you, Doctor.

CHAIRMAN BARTON. The gentleman's time is up. Mr. Terry of Nebraska.

MR. TERRY. Thank you, Mr. Chairman. Continuing on this dialogue, you started your opening statement talking about how the oil companies are not expending their profits on infrastructure, but rather hoarding the cash for a variety of different reasons, but what should they be using by the dollars by way of infrastructure? Should they be building up refining infrastructure with those dollars, pipelines, exploration? What other areas should they be using their dollars?

DR. COOPER. Well, clearly they have underinvested in refining capacity and the statements by Exxon about not wanting to build new refineries has sort of reminded people that this was a business decision. So clearly, we are, by the standard of comparison to other sectors, manufacturing sectors, we are a good five million barrels a day short of refining capacity. They should have built it, they haven't built it. That is one place to spend it and it is not that expensive compared to \$100 billion of excess cash flow, free cash flow, that you can build an awful lot of refineries. The numbers I have heard is \$2.5 billion, so there is plenty of money there to build those refineries.

MR. TERRY. Are they just not building it here, or are they building it overseas?

DR. COOPER. In fact, looking at the Exxon spreadsheet financials, I didn't look at all of them, they weren't building any place, but overseas you had, you heard this morning, you had the shift in Europe to diesel, which created excess capacity for gasoline.

MR. TERRY. We had just heard, or I have been told that they are using money to build up the infrastructure, including refining, but it is so difficult to do within the United States, that they would rather set up refineries overseas and just bring in the refined product. That is why I was curious about whether it is just U.S. investment in infrastructure, or whether the investment is overseas and you are saying that is not even happening overseas.

DR. COOPER. Again, I looked at the Exxon sheet. Ask me a question and I will go through the financials of the American majors. Now, BP and Shell, they behave differently because they are not domiciled here.

MR. TERRY. Yes. You had answered the Chairman's question and actually, that was leading into mine, about whether ethanol plants and some of the biofuel plants that are coming up, either on line now or being built now, are going to come on line, whether that could provide some relief on the supply side. And I really like that model because what I see is a bunch of corn growers banding together in a co-op and building an ethanol plant, so if you could expand on how that can and what capacity we need to build up with biofuels to provide some relief in the future. Then also, is there a way that these co-ops that are building the 50 million gallon plants for ethanol, whatever their feedstock would be, whether or not they could team up and in essence become a co-op for a refinery and combine the two processes?

DR. COOPER. Well, let me give you, we have looked very hard, because we went out on a limb with this, with our "50 by 2030," which is a 50 MPG car in a quarter of a century. I estimate that would reduce our oil consumption below what it otherwise would have been, by about five and a half million barrels a day, which is very substantial. I mean, if you think about the oil market today, we are told there is one million barrels a day of excess capacity in the whole world oil market; five million barrels a day is a big number in that context.

But the interesting thing is that there is a bill in the Senate, bipartisan, shooting for 10 million barrels a day reduction by 2030, which is my end date. Ten million barrels a day is a very big number and I can only get half of that out of the vehicle fleet by getting to 50 miles per gallon. This will tell you how deep a hole we have gotten ourselves into here, okay? So if you look out there, I can see two and a half million barrels a day of biofuels, as liquid fuels coming into that market. You have heard the numbers today. There are hundreds of thousands today, right? That is a massive increase. That is a huge challenge. I understand the farmers say we can do it, we can do it, but when you look, right? So that is a real challenge and I am only three quarters of the way to that 10 million barrel a day goal. We have a lot of work to do in order to get, to use the President's word, end our oil addiction.

MR. TERRY. Yes.

DR. COOPER. That is a tremendously difficult task and so two and a half million barrels a day of biofuels will keep a lot of farmers busy and it is a big job.

MR. TERRY. I think you have done a good job of showing how we need to have a more comprehensive approach in this. In my last few seconds, Mr. Sundstrom, E-85.

MR. SUNDSTROM. Yes.

MR. TERRY. Nebraska. Omaha, Nebraska. One pump for 600,000 people. Even if I wanted to buy a flex fuel vehicle, I am not driving 186 blocks to get to the one. One of the biggest blocks is that the gas station chains are not allowed to put an E-85 pump under the canopy. What are you all doing to see if we can't put more flex fuel vehicles out on the road and that they actually have a place to fuel up?

MR. SUNDSTROM. Well, I am not certain that it is up to us to put the pumps in. Clearly, our members are interested in the alternative fuel vehicles and we encourage their purchase, but the reality is there a very small percentage of those vehicles on the road right now and I guess we would have some sympathy for the gasoline station owner who might put in one of these pumps only to have the occasional drive by and fill up once a week, so you know, clearly something more needs to be done to stimulate investment in the infrastructure. I am not sure it is going to come strictly from the private sector.

CHAIRMAN BARTON. The gentleman's time has expired. The gentleman from Michigan, Mr. Stupak.

MR. STUPAK. Thank you, Mr. Chairman, and thank you to the witnesses for appearing. Mr. Sundstrom, thank you for speaking about the affect that high gas prices have on the American family, on the average American family because, you know, the price increase will cost the family an average about \$1,200 a year. My district in northern Michigan, it is very dependent upon tourism. We have the Great Lakes, we have national forests, outdoor recreation. We drive long distances. Can you please address the effect of this \$1,260, I believe you said in your testimony, would have on tourism in places like northern Michigan?

MR. SUNDSTROM. Well, AAA is also one of the largest travel agencies in the United States, so we are clearly very concerned about that, as well. Our members disproportionately travel at a greater rate than just about any other segment of the population. We do a summer travel survey every spring. We will actually release that on the 18<sup>th</sup> of this month. Frankly, we are not exactly sure what we are going to hear from the American public about their travel intentions this year.

We hope that because the economy overall is doing relatively well that people will feel secure enough in their jobs and their income that they will hit the road, but we are in uncharted territory. As I said earlier, the national office of AAA's in Florida, in Orlando, which is the largest tourism destination in the United States. There are areas in this country that are extremely dependent on Americans getting in their vehicles and

traveling for recreation, so you know, that is another element to the gasoline price situation that causes us a lot of anxiety.

Thanks. Mr. Cooper, in your testimony you MR. STUPAK. mentioned potential for energy commodity traders to take advantage of increased volume and validity. In fact, you specifically cite the New York Times article, "Trading Frenzy Adds to Jump in Price of Oil." Knowing that some of us believe this adds as much as 20 percent to the price of crude oil in the market. As I mentioned in my opening statement, I have introduced legislation, the PUMP Act, H.R. 5248, that would extend the oversight of the Commodities Future Trading Commission to off-market trades, which are currently unregulated. Legislation such as PUMP, which would provide increased oversight and transparency to these markets, would that be something your organization could support and secondly and specifically, on the New York Times price of oil, that article you mentioned, what are some of the recommendations short term and long term? You cite some in your testimony, but what are some of the short term/long terms we should do, if not the PUMP Act, but what else should we do?

DR. COOPER. I submitted for the record a study I did earlier this year for Attorneys General in the Midwest on natural gas supply and futures markets, and therein we had a series of recommendations and the fundamentals are almost exactly the same. The regulatory structure is a little different at the burner tip as opposed to the pump, but the physical and financial markets are essentially the same. And we emphatically supported extending oversight to the off exchange or the over-the-counter markets. They are entirely unregulated, with vital commodities that--

MR. STUPAK. So you would be supportive of the PUMP Act?

DR. COOPER. Oh, absolutely. And there is a graph in there which shows what happened when the Federal Energy Regulatory Commission said they were going to ask people to document their trades. The traders just, they stopped reporting. I mean, it was amazing. Effective oversight will scare people out of the market and frankly, as far as I can tell, the liquidity, the volatility, the risk premium, the volume is hurting us, not helping us at this stage and so oversight over those markets is critical; reporting requirements for large traders are critical, which has been in legislation that has moved around in both parties. We would also like to see better trading limits and position limits.

Chairman Barton talked about one in the gasoline oil market. We think there are others in the natural gas market; the positions are even larger and the settlement window is even smaller, so it is remarkable how few people can own how much gas and set that contract price. It just doesn't make any sense. We regulate onions and soybeans and pork

bellies better than we do natural gas and gasoline and it is a mistake we just made are we just modernized the act a few years ago, regulatory decisions were made and so I think these are decisions that need to be revisited

MR. STUPAK. Commodity Future Trade Commission, that aspect of it, we actually have passed a House bill earlier this year, I believe it is before the Senate, and then they sort of object to any more oversight of this but yet, we know at least three-fourths of all the future oil trades are unregulated. There is no transparency to it.

CHAIRMAN BARTON. The gentleman's time has expired.

MR. STUPAK. Thank you.

CHAIRMAN BARTON. Dr. Burgess.

MR. BURGESS. Thank you, Mr. Chairman. Mr. Sundstrom, several times it has been mentioned now about the mandatory refined product reserve in Europe. Can you tell us how much gasoline is currently in the reserve?

MR. SUNDSTROM. No, I cannot. Let me also say that AAA was caught unaware that Europe had gasoline reserves that they could assist us with and we were quite pleased to find out that they had that available. We had spoken with members of the industry over a number of years about that and we were told that it was completely unworkable, not feasible, and too expensive. But we were certainly gratified to find that Europe had that product available to us.

MR. BURGESS. Well, the fact that they use more diesel than gasoline, does it make it easier for them to have the refined product reserve of gasoline there?

MR. SUNDSTROM. Well, in recent years, yes, that is my understanding.

MR. BURGESS. And what about, would you have to rotate the stock so that it didn't become stale or old?

MR. SUNDSTROM. That is actually one of the reasons that we were told it was unworkable in the United States, but again, it sounds like they figured out a way to do that in Europe.

MR. BURGESS. Do you know how they have done that?

MR. SUNDSTROM. No. I do not.

MR. BURGESS. What would be the minimum level of mandatory reserve for refined product, in your mind?

MR. SUNDSTROM. Well, to begin with, I think the citizens of Florida, in the Gulf Coast, would like to see a product available that would meet their needs for a week or two, if they were to lose their capacity to receive gasoline or move gasoline in the wake of a major hurricane.

MR. BURGESS. Dr. Cooper, you referenced a memo, and I am going to assume that is a memo that we have seen in the past that Mr. Markey has had in the committee. I don't suppose you have a copy of that memo today?

DR. COOPER. I don't have it today, no.

MR. BURGESS. If it is the same one that Mr. Markey has shown us in the past, the second line on that was concern about the increasing problem with liability and with siting new refineries. Is that still an issue?

DR. COOPER. Well, as far as I can tell, it is not an issue in the sense that they haven't tried. I mean, if you think about the first time I testified here on this issue in 2001, they could have gotten refineries sited by now and you have heard, we don't have evidence of the specific refineries that have been prevented. They simply haven't tried and that was a business decision and now we have fairly strong affirmation of that from the Chairman of Exxon who says he is not going to build any new greenfield refineries because he sees demand easing up in 2020.

MR. BURGESS. Mr. Chairman, could I ask unanimous consent that a copy of that memo be made available to the members of the committee?

CHAIRMAN BARTON. Without objection, so ordered.

MR. BURGESS. With the bill that we passed last fall that would accelerate siting of refineries, is that the type of thing that you think will help in this regard?

DR. COOPER. I don't think the industry is interested in building new refineries and that is the fundamental problem. They do not see it as in their business interests and we put the quotes from the Chairman of Exxon in, it is in the document we submitted. Having gained market power over price, it is not in their interest to lose that market power by building and there are so few of them that there is not a competitive market that forces them to make those decisions, so I don't think that the impediment was, though, the siting problem. I think the problem was a business decision and the economics of that business decision haven't changed all that much.

MR. BURGESS. But indeed, there are other companies that are smaller companies and, if the siting of refineries was not problematic and if they were perhaps some liability relief, might that not go toward creating more refinery locations?

DR. COOPER. There is precious entry in this business and the list of companies I have read you is a massive exit and so there is very little entry in this business. The barriers to entries are very great.

MR. BURGESS. But still, small start-up energy companies are not unheard of. Down in my district, there is a gas company which started

poking holes in the Barnett Shale a few years ago and now they are a big player, so it does happen.

DR. COOPER. That is right.

MR. BURGESS. They started up with some of the research and development that this Congress, not this Congress, but Congress provided them, some Federal money that was provided, so it is not necessarily a bad thing to increase energy supply.

DR. COOPER. No, I just said there is precious little, not enough to discipline the price.

MR. BURGESS. Mr. Wilkins, I was grateful to hear you say that you didn't favor price controls, though I will have to admit, I am not a big purchaser of flowers, but my district office bought Starbucks coffee for an academy event not too long ago and I asked them how much it cost and it was a 2.8 liter container and it cost \$12, that is \$16.29 if I remember my metric conversions, per gallon, if I remember my metric conversions. I was just going to ask if you thought we needed a price control on Starbucks because the price seems to be out of hand and our constituents can't afford it. With that, Mr. Chairman, I will yield back.

CHAIRMAN BARTON. I never knew my metric conversion. The fact that you can remember yours is a testimony. Let us see. Does Mrs. Cubin want to ask questions of this panel?

MRS. CUBIN. Mr. Chairman, I would like to move on. I will submit my questions to them in writing.

CHAIRMAN BARTON. All right. Does Mr. Radanovich wish to ask questions of this panel?

MR. RADANOVICH. Thank you, Mr. Chairman. I will submit them in writing, as well.

CHAIRMAN BARTON. Okay. Does Mr. Bass? Mr. Bass.

MR. BASS. Yes, Mr. Chairman, I do not have any questions to ask these fine witnesses here today and I want to get on to the markup that is happening, but I do want to welcome a dozen or so constituents of mine from the Vesta Roy Excellence in Public Service who are visiting me right now and they are in the crowd here today and I yield back, Mr. Chairman.

CHAIRMAN BARTON. Well, if they will stand up.

MR. BASS. Thank you, Mr. Chairman, and I yield back.

CHAIRMAN BARTON. Does Ms. Bono wish to ask questions?

Ms. Bono. Thank you, Mr. Chairman. I just have a brief one, actually, I think. I apologize. I have been out of the room for almost the entire questioning, so I hate to be redundant, but I believe that one question that hasn't been asked is something communities can do, is synchronizing traffic lights something that we have looked at or has that

question been asked? I apologize again, but synchronizing traffic lights, it seems like we could make a great dent in efficiency.

CHAIRMAN BARTON. That question has not been asked.

Ms. Bono. Thank you, Mr. Chairman.

CHAIRMAN BARTON. It is a good question.

DR. COOPER. Well, I think there is a very broad array of things that we can do and anyone who can show a local government that a change in rules or regulations will, in fact, lower the oil consumption of their citizens owes it to those citizens. The example I like to use is remarkable; in many communities in America, it is illegal to put a grocery store in a neighborhood. Because of zoning laws, we have separated it. So people have to get in their car to go to the grocery store, and so there is a large array of things that we could do to save oil and gasoline and I think we ought to have programs to stimulate that.

Ms. Bono. But your group hasn't looked at specifically synchronizing traffic lights?

DR. COOPER. We haven't. We have been focused on the automobile because increasing the efficiency of the automobile is the grand slam in this equation.

Ms. Bono. Thank you. In my district, actually, we have a lot of lanes specifically designed for electric vehicles, not hybrids, but the little tiny electric vehicles. People do take those to the grocery store, so we are working on it. But also, for Mr. Wilkins, where are we here? Within your industry, have you witnessed more concern over fuel costs and impacts in certain geographic areas? I would assume the desert, California, southwest region would be among the higher regions and if so, do those of us who are mothers in the southwest region expect six flowers instead of a dozen on Mothers Day?

MR. WILKINS. Well, certainly for Mothers Day, the cost of flowers will vary depending upon supply and demand, and I don't think that we have really heard a lot about costs being higher in certain regional areas of the country, although that may be. Certainly, fuel costs are higher in California and on the West Coast than they are on the East Coast and so I wouldn't expect that you would see a cut back one way or another. When there are temporary price increases, you will generally see it being passed along in the form of the delivery charge or something like that or the retail florist. The provider will be absorbing at least part of that cost.

MS. BONO. So in your industry are you looking for more efficient vehicles or alternative fueled vehicles as a whole?

MR. WILKINS. Yes, I think a number of industry partners are doing that. In our particular case, we are right now looking at more fuel efficient vehicles and it is kind of a sort of a conundrum between picking the types of vehicles because what we find is that the vehicles that we have been using, always diesel fuel based powered vehicles, the vehicles that tend to be able to carry the most weight and to be the most reliable are also the less fuel efficient and we are looking at trucks like the Sprinters, that a lot of folks have heard of. But they are a lighter weight truck. They have a lot better fuel mileage, but they can't carry as much load. In some cases, you are forced to have two trucks of that type to replace one truck that is less fuel efficient.

Ms. Bono. All right.

MR. WILKINS. And so there are some of the things that we are involved in, but you know, we have even gone the route of consolidating routes using computer routing software that has allowed us to take trucks off the road, but it also means laying off some people at the same time because of that consolidation.

Ms. Bono. Thank you. I thank you all. Mr. Chairman, I know you want to get on to the markup, so thank you for holding this hearing and I yield back. Thank you all very much.

CHAIRMAN BARTON. Thank you. Seeing no other Members present who haven't been given a chance, we are going to adjourn this hearing. Thank you to you gentlemen and we will probably have written questions for you. This hearing is adjourned. We are going to reconvene the markup at 3:30, so we will change the room and reconvene for the markup at 3:30.

[Whereupon, at 3:12 p.m., the committee was adjourned.]

# RESPONSE FOR THE RECORD BY DR. MARK COOPER, RESEARCH DIRECTOR, CONSUMER FEDERATION OF AMERICA

### The Honorable Barbara Cubin

1. In regards to the currently volatile energy markets, you state in your testimony that "if we had started working on effective solutions six years ago, we could be well into the mid-term of a long-term policy shift." Would you then agree that American consumers would not be in this situation had the energy bill first passed by this committee and the larger House of Representatives in the summer of 2001 been enacted into law?

No. The policies that will actually address the problem have never been included in legislation passed by either house. The key to a long-term solution is a substantial increase in the fuel efficiency of the vehicle fleet. The House has voted this down. In the mid-term, a strategic refinery reserve provides capacity to cushion supply shocks. The House voted that down.

2. You also stated in your testimony that the refining industry have historically "closed refineries for business reasons and refuse to build new ones for business reasons." I agree. Would it then not make sense for this Congress to pass the Refinery Permit Process Schedule Act (HR 5254) – a bill that would encourage new refining capacity by streamlining the current facility citing process?

As I pointed out in my testimony, the industry has no desire to build new refineries. It does not see the business value of doing so, as surplus capacity puts downward pressures on prices. The solution is a strategic petroleum reserve, which can easily be built within the existing requirements.

# RESPONSE FOR THE RECORD BY GEOFF SUNDSTROM, DIRECTOR OF PUBLIC RELATIONS, AMERICAN AUTOMOBILE ASSOCIATION

### The Honorable Barbara Cubin

- Q1. Are there regions in the country where your members are disproportionately affected by rising gas prices? In your testimony, you astutely pointed out that skyrocketing fuel prices do not present the same economic challenge to urban dwellers -with access to mass transit as they do for regular drivers. As public transportation is relatively nonexistent in Wyoming and much of the rural west, driving is simply a necessity. What conservation measures do you recommend to your rural members in today's climate of high fuel costs?
- A1. AAA has for many years published a free brochure on conserving energy and saving money at the gas pump called "AAA Gas Watcher's Guide." This publication offers tips and advice that can be useful to all motorists and is available at many AAA offices and on the Web at www.aaaexchange.com.

With regard to the special fuel-use situation encountered by those who must travel long distances in rural areas, AAA suggests the purchase or lease of the most fuel-efficient vehicles available that also meet the sometimes special needs of rural households. For some motorists this may mean a switch within the same family of vehicles, from a larger truck to a smaller truck for example, or from a SUV model with a large engine to the same model equipped with a more fuel-efficient motor. Other consumers may be able to move from a large car, truck or SUV into a more fuel-conserving car, minivan or station wagon. AAA makes this recommendation because many of the vehicles consumers choose to drive are much heavier and have a lot more power than what is truly needed to safely transport them and their belongings from place to place. This combination of excess weight and horsepower consumes more fuel than is necessary and adds expense to household budgets regardless of whether a consumer lives in the city or country.

Rural motorists who frequently drive on roads with high speed limits should also be aware that driving safely at lower speeds generally increases fuel economy. Long-distance drivers also need to pay special attention to the importance of regular maintenance on vehicles that quickly accumulate miles on their odometers. Establishing a maintenance routine on the basis of miles-driven, rather than on months or years of ownership, is a best practice in this circumstance. Maintaining proper inflation of tires also contributes to improved fuel economy.

Combining errands into a single continuous trip -- a technique sometimes called trip-chaining -- can be an effective way of limiting miles driven and fuel consumed, and car pooling with others who must make regular long-distance trips to similar destinations can be helpful for some households. Another tip that may be useful is to consider driving a more fuel-efficient vehicle from day-to-day, and occasionally renting a larger vehicle if extra carrying capacity is necessary. Using cargo trailers to haul materials to the destination and then unhitching them, can allow the use of a smaller vehicle for everyday transportation needs. Continuously driving a large car, truck, van or SUV that is equipped with rarely-used excess carrying capacity, generally uses more fuel and costs more money at the gas pump than is necessary for many households.

# RESPONSE FOR THE RECORD BY WILLIAM WEHRUM, ACTING-ASSISTANT ADMINISTRATOR, OFFICE OF AIR AND RADIATION, U.S. ENVIRONMENTAL PROTECTION AGENCY



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

JUL 1 7 2006

OFFICE OF CONGRESSIONAL AND INTERGOVERNMENTAL RELATIONS

The Honorable Joe Barton Chairman Committee on Energy and Commerce U.S. House of Representatives Washington, DC 20515

Dear Mr. Chairman:

Thank you for the opportunity to respond to questions for the record that followed a May 10, 2006, hearing entitled, "Gasoline: Supply, Price, and Specifications." I hope this information will be useful to you and the members of the Committee.

If you have any further questions, please contact me or your staff may contact Lora Strine in my office at 202-564-3689.

Sincerely,

Stephanie N. Daigle Associate Administrator

Enclosure

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### **ENCLOSURE**

### Questions from the Honorable John D. Dingell

1. Why is EPA taking this "first step" to assess the issue of boutique fuels, when EPACT required you to begin this assessment nine months ago?

EPA and Department of Energy (DOE) began discussing plans for the assessment required by the Energy Policy Act of 2005 (EPACT) prior to the Agency convening the Boutique Fuels Task Force. Our work with DOE continues and is aided by the information and insights that the Task Force process has provided.

Since EPACT was enacted, no new state boutique fuels under Clean Air Act section 211(c) have been approved by EPA. The Agency has been faced with some very complicated issues associated with development of the Renewable Fuels Standard (RFS) and elimination of the RFG oxygenate standard. We have also been working to implement the EPACT provision that calls for the publication of a boutique fuels list to effectively limit the types of boutique fuels available in the U.S. The proposed list was signed by the Administrator on May 31, 2006, and published on June 6, 2006, in the Federal Register.

2. Please describe in detail all activities taken by EPA to carry out the study described in section 1541(c) and the amount of funds expended on this study.

As noted above, EPA and DOE are currently proceeding with this joint study. EPACT calls for the joint study to assess the effects of state boutique fuel programs on air quality, fuel blends, fuel availability, fungibility, and costs, with a focus on making recommendations to Congress for legislative changes supporting development of a federal fuels system that maximizes fungibility and supply and addresses air quality requirements and reduces price volatility. We have committed the staff resources needed to complete the study as required.

Will this study be completed, as required, by August 8, 2006? If not, please provide an explanation.

EPA intends to complete the study by the legislative deadline.

- 4. The press release states that EPA will be providing the President with a report in the next six to eight weeks. The law requires you to provide the Congress what appears to be the same or similar report.
- (a) Please explain whether or not the two reports are the same. If they are not, please explain why the report to the President, for which no funds are authorized in the law, is taking precedence over EPA's statutory responsibility.

The two reports are complementary. The Task Force report includes findings and recommendations concerning boutique fuels and cooperation between States on fuel supply decisions. The Task Force report will provide highly relevant information that can be used in part to form the basis of the Report to Congress.

### (b) How much will the preparation of this report to the President cost?

EPA had no specific budget for the Task Force report as this was a new and unanticipated assignment. The primary cost of the Task Force report was EPA staff time.

### (c) The statute authorized \$500,000 for the study. How much have you budgeted for your report to Congress?

At this time, Congress has yet to appropriate any funds for EPA to undertake this study. We are, however, working with DOE on a study plan and a budget for this work.

# (d) Did EPA request specific funds for this study from Congress? If so, how much? Did you receive the appropriation?

EPACT was enacted in August 2005, well after EPA's FY2006 budget request. EPA requested resources in FY2007 for EPACT implementation, which have not yet been appropriated. EPA is in the process of preparing its FY2008 budget request.

# 5. (a) Am I correct that, as of May 8, 2006, EPA had not carried out your responsibility to determine the total number of boutique fuels approved, nor published the list in the Federal Register by December 6, 2005?

EPA determined the total number of approved boutique fuels, and the Administrator signed the proposed list on May 31, 2006. The list was published in the Federal Register on June 6, 2006, and the public comment period is scheduled to last 60 days.

### (b) How many full-time employees have been working on this matter since August?

Two full-time employees are working on this.

### (c) How much has EPA expended to date to fulfill this responsibility?

The cost of the full-time employees is the total cost to date.

### (d) When will the proposed regulations be published?

The proposed boutique fuels list was published in the Federal Register on June 6, 2006.

### (e) What is your explanation for failing to meet the statutory deadline?

Given the fact that no new state fuels were approved under CAA section 211(c) during this time period, we wanted to carefully study the complicated wording of the provision in order to appropriately compile the list.

6. (a) Am I correct that EPA has not yet carried out your responsibility to promulgate regulations governing temporary fuel waivers no later than 180 days after enactment of EPACT, as required by Section 1541(a)?

Within weeks of the passage of EPACT, Hurricane Katrina hit the Gulf States and was followed shortly after by Hurricane Rita. Immediately following these natural disasters, the Agency spent considerable time and effort utilizing the new authority to address the resulting fuel disruptions. We were dealing with implementation issues and the aftermath of the hurricanes through January 2006. As a result of this effort, fuel availability was enhanced in the affected areas without precipitating shortages in other regions.

(b) How many full-time employees are working on this matter?

During last year's hurricane season, EPA had approximately 12 FTE working to evaluate the need for fuel waivers.

(c) How much have you expended to date to fulfill this responsibility?

No funds outside of payroll have been expended to date.

(d) When will proposed regulations be published?

Currently, there are no plans to put these regulations in place. As you know, EPACT required EPA to take many actions, including a number on tight schedules. Since EPA has not yet received additional appropriations to cover the cost of implementing EPACT, we have had to prioritize our efforts. Our top priority under EPACT is to develop regulations needed to implement the RFS program. This effort is supported by a significant amount of EPA resources.

(e) When will finalized regulations be published?

Please refer to the previous answer.

(f) What is EPA's explanation for failing to meet this deadline?

Please see (d) above.

- Section 392 of EPACT allows the Administrator to enter into a refinery permitting cooperative agreement with a State at the request of the Governor of a State.
- (a) Has EPA entered into any such agreements? If so, for each agreement, please provide a copy of the agreement.

No.

(b) Have any Governors requested that EPA enter into such an agreement? If so, please identify which Governors and describe the status of the request and EPA's response thereto.

No.

(c) Have any refiners inquired about such an agreement or about submitting consolidated permit for a new refinery.

I am not aware of refiners inquiring about refinery cooperative agreements or about submitting consolidated permits. I expect that refiners would direct inquiries about such agreements to the States since it is Governors, not the refiners, who are authorized to request the agreement with EPA.

8. Please list EPA's fuel-related responsibilities under EPACT, and for each, provide the amount the Administration requested for these activities for FY 2006 and 2007. If additional monies and FTEs were not budgeted for these activities, please explain how EPA intends to meet these EPACT obligations.

The following list displays EPA's key fuel-related responsibilities under the Energy Policy Act of 2005 along with a summary of the workyears (FTE) and contract funding requested by the Administration in the President's FY 2007 budget request. The President's FY 2007 budget request contains 20 FTE and \$11.8 million in contract dollar support for establishment of a renewable fuels standard and reporting and assessment requirements. For FY 2006, the EPAct was enacted after Congress had already passed EPA's FY 2006 appropriation bill. Therefore, the FY 2006 budget did not contain specific funding for EPAct activities. The Agency is currently reviewing and prioritizing EPAct requirements for FY 2006 and will redirect existing funds to address the highest priority needs. The Agency is currently assessing its EPAct resource needs as part of its deliberations on the FY 2008 budget request.

Renewable Fuel Standard and Credit Program	20.0 FTE \$9.0 million
Calculating RFS Standard Credit value for cellulosic ethanol Credit trading program 25% minimum seasonal use State petitions to waive RFS Waive RFS for 2006 in part or whole Small refinery exemptions Fuel waiver provisions for Acts of God	Title 15 Section 1501(a)(2) Title 15 Section 1541(a)

120		
Other Significant Regulatory Actions	<u>0 FTE</u>	<u>\$0</u>
Waive RFS based on State requests Ethanol RVP waiver provisions RFG opt-in provision for OTR RFG VOC standard consolidation New MSAT standards Commingling of ethanol and non-ethanol fuels Remove oxygen mandate for RFG	Title 15 Secti Title 15 Secti Title 15 Secti Title 15 Secti Title 15 Secti	on 1507
Implementation Requirements	<u>0 FTE</u>	<u>\$0</u>
Processing of RFS state waiver requests Annual RFS evaluation/revisions Process state RVP waiver rescission requests Enforce fuel standards for ethanol State-by-state survey of renewable fuel use	Title 15 Secti Title 15 Secti	on 1501(a)(2)
Other Studies, Reports, and Assessments	0 FTE	\$2.8 million
Annual surveys of renewable fuel use Study of permeation emissions from ethanol use SIP-approved state boutique fuels listing Study of health effects of oxygenates Effect of Energy Bill on air quality Revise EPA's Complex Model Fuel system harmonization study	Title 15 Secti Title 15 Secti Title 15 Secti Title 15 Secti Title 15 Secti Title 15 Secti Title 15 Secti	on 1506 on 1541(b) on 1505 on 1506 on 1506

# GASOLINE: SUPPLY, PRICE, AND SPECIFICATIONS

### **THURSDAY, MAY 11, 2006**

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, DC.

The committee met, pursuant to notice, at 10:10 a.m., in Room 2123, Rayburn House Office Building, Hon. Joe Barton [chairman] presiding.

Present: Representatives Barton, Hall, Bilirakis, Stearns, Deal, Norwood, Cubin, Shimkus, Wilson, Fossella, Bass, Pitts, Bono, Walden, Sullivan, Burgess, Blackburn, Waxman, Markey, Boucher, Eshoo, Stupak, Green, Inslee, and Ross.

Staff Present: Margaret Caravelli, Counsel; Maryam Sabbaghian, Counsel; David McCarthy, Chief Counsel for Energy and Environment; Sue Sheridan, Minority Senior Counsel; Lorie Schmidt, Minority Counsel; and Bruce Harris, Minority Professional Staff Member.

CHAIRMAN BARTON. The committee will come to order. Since this is a continuation of a series of hearings we have had on our gasoline supply situation and, more generically, the energy situation for this country with respect to oil and gas, we are not doing opening statements.

Today, our witness list includes a wide range of experts: We have Mr. Red Cavaney, who is the President of the American Petroleum Institute; we have Mr. Bob Dinneen, who is the President and Chief Executive Officer of the Renewable Fuels Association; Mr. Bob Slaughter, who is President of the National Petrochemical and Refiners Association; Mr. William S. Becker, who is the Executive Director, State and Territorial Air Pollution Program Administrators of the Association of Local Air Pollution Control Officials; we have Mr. Paul Reid, who is the President of Reid Petroleum in Lockport, New York, on behalf of the National Association of Convenience Stores and Society of Independent Gasoline Marketers of America; Mr. William H. Shea, who is the President and CEO of Buckeye Partners, and he is here on behalf of the Association of Oil Pipelines; and last, but not least, we have Mr. John Conley, who is President of the National Tank Truck Carriers, Incorporated.

STATEMENTS OF RED CAVANEY, PRESIDENT, AMERICAN PETROLEUM INSTITUTE; BOB DINNEEN, PRESIDENT

AND CEO, RENEWABLE FUELS ASSOCIATION; BOB SLAUGHTER. PRESIDENT. **NATIONAL** PETROCHEMICAL & REFINERS ASSOCIATION; S. WILLIAM BECKER, EXECUTIVE DIRECTOR, STATE AND **TERRITORIAL AIR POLLUTION PROGRAM** ADMINISTRATORS/ASSOCIATION **OF** LOCAL AIR **POLLUTION CONTROL OFFICIALS: PAUL** PRESIDENT, REID PETROLEUM CORPORATION, ON **BEHALF OF** THE **NATIONAL** ASSOCIATION OF **AND** CONVENIENCE **STORES SOCIETY** OF INDEPENDENT GASOLINE MARKETERS OF AMERICA; WILLIAM H. SHEA, PRESIDENT AND CEO, BUCKEYE PARTNERS, LP, ON BEHALF OF THE ASSOCIATION OF OIL PIPELINES; AND JOHN CONLEY, PRESIDENT, NATIONAL TANK TRUCK CARRIERS, INC.

CHAIRMAN BARTON. Gentlemen, welcome. Your statements are in the record in their entirety. We will start with you, Mr. Cavaney. We have got seven witnesses on the first panel. We will give each of you, let's say 7 minutes to explain your testimony, and then we will have obviously some questions.

Welcome, Mr. Cavaney.

MR. CAVENEY. Thank you very much, Mr. Chairman, honored members of the committee.

U.S. oil and natural gas companies understand the frustration that consumers have expressed about energy prices. We recognize that high energy prices are adversely impacting individuals, households, businesses, and potentially our economy itself. Our members are working very hard to provide additional supplies.

Crude oil inventories have been building and are at record levels. At the same time, we are meeting some of the world's most stringent new environmental requirements. During the week ending April 21<sup>st</sup>, refineries were operating above 90 percent of capacity, and for the month of March utilization was 90.8 percent, which is higher than from March of a year ago.

To address refining capacity concerns, we have spent billions of dollars to recover from last year's hurricanes and we anticipate bringing an additional 1.3 million barrels of new refining capacity per day onstream between now and 2011.

The industry has also undertaken major investments to meet the 4 billion gallon renewable fuels standard for 2006, while also delivering new gasoline with 90 percent less sulfur and new onboard diesel fuel with 97 percent less sulfur.

Oil and gas is a long lead time business, and we are making the necessary reinvestments. Since 1992, oil companies in the United States have reinvested more than \$1 trillion compared to their cumulative earnings over the same period of almost \$700 billion. Our industry is also looking to the future. Since 2000, we have reinvested \$98 billion in emerging energy technologies, including alternatives, an amount that represents 73 percent of the total U.S. investment in this area by the Federal government and all U.S. companies.

Congress should not impede the industry's efforts focused on reinvesting today's earnings to meet tomorrow's energy needs. Oil companies do not set the price of crude. It is bought and sold in international markets, and the price paid for a barrel of crude oil reflects the market conditions of that day. Importantly, more than half of the price of a gallon of gasoline is attributable to the cost of crude.

As noted in a June 2005 Federal Trade Commission report, and I quote, "The world price of crude oil is the most important factor in the price of gasoline. Over the last 20 years, changes in crude oil prices have explained 85 percent of the changes in the price of gasoline in the United States." As evidenced by more than 30 Federal Trade Commission and other government investigations over several decades, our industry has been exonerated of any anti-competitive behaviors. And let me again make clear to the committee, we condemn price gouging.

Today's energy situation is shaped by past government policy decisions made over the previous two decades. These policies have resulted in decreased domestic oil and natural gas production, modest improvements in energy conservation and efficiency, and increased imports as industry was left with little access to U.S. resources, and had no choice but to source supply from abroad in order to meet growing U.S. consumer demand.

In recent years, growing demand for oil from China, India, and the United States, has come at a time of diminishing spare worldwide production capacity, and rising geopolitical tensions have placed great stress on the available global supply of crude oil. The solution to the energy challenges before us is to increase and diversify sources of supply, including alternatives, reduce demand, and expand infrastructure.

We have sufficient domestic oil and gas resources remaining to be discovered in the U.S., enough oil to power more than 60 million cars and heat more than 25 million homes for 60 years, and enough natural gas to heat 60 million homes for 160 years. Only government policies stand in the way of increasing access to these resources, facilitating refinery capacity and pipeline expansions, and increasing energy security. Congress recognized the harmful effects of localized boutique

fuels in last year's Energy Policy Act, limiting the number of fuels that States may adopt and requiring studies of the effects of boutique fuels.

Our industry strongly supports the use of ethanol as a valued gasoline additive. However, the expansion of the patchwork quilt of boutique fuels by States mandating ethanol use at different concentrations and/or under differing terms is counterproductive to growing ethanol presence in the gasoline supply.

To maximize success with ethanol, we need to concentrate on its integration into the national gasoline pool while permitting E-85 to grow in those locations where it meets the test of the marketplace, not the reverse.

I conclude with some additional thoughts that could further increase refining capacity and add additional flexibility to the distribution system: Streamline the permitting process to ensure timely reviews of capacity expansion requests and provide decisional certainty. Reform new source review requirements to clarify what triggers these reviews, and further explore former U.S. military bases as potential sites for refineries and related infrastructure opportunities.

I look forward during the questions and answers to providing other insight, and I thank you, Mr. Chairman.

CHAIRMAN BARTON. Thank you, Mr. Caveney. [The prepared statement of Red Cavaney follows:]

PREPARED STATEMENT OF RED CAVANEY, PRESIDENT, AMERICAN PETROLEUM INSTITUTE

# Summary of Statement of Red Cavaney, API President and CEO, before the House Energy and Commerce Committee

- The oil and natural gas industry understands the frustrations that consumers have expressed about energy prices. We recognize that high energy prices are adversely impacting individual households and potentially our economy.
- More than half the cost of a gallon of gasoline is the cost of the crude oil. U.S.
  refiners pay the world price for crude and distributors pay the world price for
  imported petroleum products. Oil companies do not set the price of crude oil.
- The delicate supply/demand balance in the global crude oil market makes this
  market extremely sensitive to political and economic uncertainty, unusual weather
  conditions, and other factors.
- Additional factors in the increased gasoline prices are the end of the reformulated gasoline (RFG) oxygen requirement and the transition by many refiners from the gasoline additive MTBE to ethanol.
- U.S. oil and natural gas companies have been working hard to provide additional
  supplies to the marketplace. As of May 5, 1,624 drilling rigs were at work, the
  highest level in 20 years. As of the week ending April 21, refineries were
  operating at 90.1 percent of capacity, only the fourth time that refineries were
  operating above 90 percent since Hurricane Rita.
- Individual states should not force the use of ethanol by devising their own blend
  of gasoline/ethanol mandates. The last thing our nation needs now is an expansion
  of the "boutique fuels" patchwork of required differing gasoline blends by
  mandating ethanol use at different concentrations or under different terms.
- Our industry's prescription for success with ethanol is to concentrate on ethanol
  integration into the full gasoline pool and to permit E-85 to grow in those
  locations where it meets the test of the commercial and regulatory marketplace.
- Our nation's energy policy needs to focus on increasing supplies; encouraging
  energy efficiency in all sectors of the economy, including transportation; and
  promoting responsible development of alternative and non-conventional sources
  of energy.
- To enable the U.S. to meet future energy needs, the oil and gas industry must be permitted to invest today's earnings in meeting tomorrow's energy challenges. Congress can help by opening up more of the resource-intensive areas in our nation that are off-limits to new production. History has shown that a healthy and competitive market, free of artificial restraints, is the most efficient way to affordably meet the fuel needs of U.S. consumers.

I am Red Cavaney, President and CEO of API, the national trade association of the U.S. oil and natural gas industry. API represents more than 400 companies involved in all aspects of the oil and natural gas industry, including exploration and production, refining, marketing and transportation, as well as the service companies that support our industry.

### Introduction

The oil and natural gas industry understands the frustrations that consumers have expressed about energy prices. We recognize that high energy prices are adversely impacting individual households and potentially our economy. The industry is also cognizant of the criticism for what may appear to some as unreasonable or unjustified prices and high earnings. I will attempt to address those concerns and to offer the proper context in which to view both prices and earnings.

### Factors in the cost of gasoline

In order to understand the higher costs of gasoline and other motor fuels, we need to consider them in the context of the world energy supply and demand situation.

We currently import more than 60 percent of the crude oil and petroleum products we consume. American refiners pay the world price for crude and distributors pay the world price for imported petroleum products. It is important to understand that oil companies do not set the price of crude oil. Crude oil is bought and sold in international markets, and the price paid for a barrel of crude oil reflects the market conditions of the day. Whether a barrel is produced in Texas or Saudi Arabia or elsewhere, it is sold on the world market, which is comprised of hundreds of thousands of buyers and sellers of crude oil from around the world.

There is a fragile balance between the world's supply and demand for crude oil. Because of this tight market, any disruption of oil supply – or even the threat of a disruption – can push prices upward as buyers and sellers in the worldwide marketplace look to secure supplies for their customers.

It is well recognized that the market for crude oil has tightened. World oil demand reached unprecedented levels in 2005 and continues to grow due to strong economic growth, particularly in China and the United States. EIA reports that global oil demand in 2004 grew by 3.2 percent – the strongest growth since 1978 – and grew 1.4 percent in 2005 to nearly 83.6 million barrels a day. EIA projects growth for 2006 at 1.8 percent. By comparison, world demand between 1993 and 2003 grew at an average rate of 1.6 percent. EIA, in its Annual Energy Outlook (April 2006) estimates world oil consumption to be 85.2 million barrels per day, which is about 100,000 barrels a day less than estimated average 2006 production.

World oil spare production capacity – crude that can be brought online quickly during a supply emergency or during surges in demand – is at its lowest level in 30 years and is a critical factor to observe. Current spare capacity is equal to only about 1 percent of world demand. Accordingly, the world's oil production has lagged, forcing suppliers to struggle to keep up with the strong growth in demand.

The delicate supply/demand balance in the global crude oil market makes this market extremely sensitive to political and economic uncertainty, unusual weather conditions, and other factors. Over the past several years, we have seen how the market has reacted to such diverse developments as dollar depreciation, cold winters, the postwar insurgency in Iraq, hurricanes in the Gulf of Mexico, the Venezuelan oil workers' strike in 2002-2003, uncertainty in the Russian oil patch, ongoing ethnic and civil strife in Nigeria's key oil producing region, and decisions taken by OPEC, as well as here in Washington, D.C..

This year has been described by some as the "worst political-risk year" for energy supplies since 1973, the year of the oil embargo. Recent weeks have seen increasing concern about potential supply interruptions from political turmoil, conflicts, and uncertainty in such countries as Bolivia, Iran, Iraq, Nigeria, and Venezuela.

Additional factors in the increased fuel prices include the end of the reformulated gasoline (RFG) oxygen requirement on May 5, and the phase-out by some refiners of the gasoline additive MTBE. According to the U.S. Energy Information Administration (EIA), refiners are maximizing their effort to switch to ethanol, but they must deal with

logistical challenges in its transport. Unlike MTBE, ethanol cannot be shipped through pipelines and must be carried by barge, railcar or tanker truck. As the market is currently structured, ethanol is considerably more expensive than gasoline, and imports face a 54 cent per gallon tariff. The oil and gas industry, however, is the largest consumer of ethanol and will continue to play a key role in facilitating and expanding our nation's use of ethanol as a key component of our nation's transportation fuels mix.

### How U.S. oil and natural gas companies are responding to current energy challenges

U.S. oil and natural gas companies have been working hard to provide additional supplies to the marketplace, while, at the same time, meeting stringent new environmental requirements:

- Domestic oil production from the Gulf of Mexico continues to recover from the
  damage incurred by Hurricanes Katrina and Rita. According to the U.S.
  Minerals Management Service, 22 percent of the oil production and 13 percent
  of the natural gas production from the Gulf remains shut in. Nevertheless,
  drilling activity remains at a high level and has helped offset this reduction. As
  of May 5, 1,624 drilling rigs were at work in the U.S., the highest level in 20
  years.
- Crude oil inventories have been building and are at record levels. For the week
  ending April 28, crude stocks were 346.9 million barrels, or 12 million barrels
  above the level of a year ago. Inventories must be built ahead of heavy summer
  demand
- Refineries were operating at 86.7 percent of capacity during March. Some refineries are undergoing routine maintenance that had to be delayed because of the hurricanes. Moreover, the industry is still recovering from the hurricanes' extensive damage. Through March, roughly 5 percent of refining capacity was not yet fully operational. When this is taken into consideration, the refinery utilization rate was actually higher than in March 2005, at 90.8 percent versus 90.2 percent. One refinery returned to normal operations of more than 400,000 barrels per day in late April after seven months of repairs following Hurricane Katrina. Two others are not yet fully operational and represent a combined capacity of 247,000 barrels per day or 3.3 percent of total U.S. refinery capacity. As of the week ending April 21, refineries were operating at 90.1 percent of capacity, only the fourth time that refineries were operating above 90 percent since Hurricane Rita.
- Despite the logistical challenges in blending ethanol in gasoline, the industry anticipates no problems in meeting the 4 billion gallon Renewable Fuels Standard for 2006. In fact, in many regions of the country, consumers are already driving on a mixture of gasoline and 5.7 percent to 10 percent ethanol.
- Refiners are completing the third year of a three-year schedule to eliminate 90 percent of the sulfur in gasoline. This already has enabled automobile manufacturers to begin equipping new passenger cars and light trucks with the advanced technology necessary to comply with the stringent Tier 2 emissions standards promulgated by the Environmental Protection Agency. As a result, it now takes 33 vehicles running on low-sulfur gasoline today to equal the pollution emissions of just a single 1970 vehicle.
- Finally, refiners are reducing the maximum amount of sulfur allowed in on-road diesel fuel by 97 percent to enable the production of substantially cleaner new diesel engines. When the current on-road heavy-duty vehicle fleet has been fully replaced by 2030, the combination of the new fuel and new diesel engines should have eliminated 90 percent of the pollution that today's trucks and buses produce.

### Importance of increased energy efficiency

API supports increased energy efficiency in all sectors of the economy, including transportation, as an essential part of efforts to meet U.S. energy challenges.

An important reason why hydrocarbons have been the choice of consumers worldwide is due to the fact that they contain nearly twice the energy per gallon as many other energy sources. Thanks to advances in technology and market forces, our hydrocarbon-based economy is getting more and more energy efficient. In 1970, the United States used about 1.4 barrels of oil for each thousand dollars of real GDP. By 2000, that had fallen almost in half to about seven-tenths of a barrel. And, by 2025, our nation is projected to consume only about one-half a barrel of oil for each thousand dollars of GDP.

An example of how technology increases energy efficiency is the use of cogeneration to save energy in refineries and other industrial facilities. Cogeneration is the simultaneous generation of heat and electricity, can be more than twice as efficient as conventional generation, and is increasingly being implemented by refiners to help power their facilities. In some instances, excess electricity is generated at the refinery, which can be sold off-site for use by schools, hospitals and many other facilities.

Cogeneration is an important tool helping oil companies become more energy efficient. To demonstrate their commitment to continued improvement in aggregate energy efficiency, API member refiners have voluntarily agreed to a 10 percent improvement between 2002 and 2012 as part of API's Climate Challenge Program. That program is contributing to a national goal of reducing greenhouse gas emissions by 18 percent by 2012. The most recent reporting cycle indicates that API members are on track to achieve their 10 percent improvement goal. These efforts have already produced ongoing daily energy savings equal to that needed to power 475,000 cars or heat 450,000 homes with natural gas.

However, while increased energy efficiency is a critical component of a meaningful U.S. energy policy, it is not, and can not be, the only component. The U.S. energy Information Administration projects that by 2030, total U.S. energy demand will increase by 41 percent – even with a 39 percent increase in energy efficiency.

### Anti-competitive pricing

Some are again accusing the industry of "price gouging." Our industry has been repeatedly investigated over many decades by the Federal Trade Commission, other federal agencies, and state attorneys-general. Of the more than 30 investigations, none have ever found our companies to have engaged in anti-competitive behavior to drive up fuel prices, and we are confident current reviews will arrive at the same conclusion.

Some allege that recent oil company mergers have caused higher crude oil and gasoline prices. But the price of crude oil is the consequence of thousands upon thousands of transactional decisions made on the world market every day. No one company or group of companies has control over that price. In terms of market power, large international oil companies own less than 10 percent of the world's oil resources. According to the Federal Trade Commission's August 2004 report, *The Petroleum Industry: Mergers, Structural Change, and Antitrust Enforcement*, "recent large mergers among major oil companies have had little impact on concentration in world crude oil production and reserves." And, as noted by the FTC in its June 2005 report, *Gasoline Price Changes: The Dynamic of Supply, Demand, and Competition*, "The world price of crude oil is the most important factor in the price of gasoline. Over the last 20 years, changes in crude oil prices have explained 85 percent of the changes in the price of gasoline in the U.S."

We are concerned about the adverse impact of the proposed Oil and Gas Industry Act of 2006 (S. 2557) recently introduced by Senator Specter. Section 2 of that proposed act would amend the Clayton Act to make it illegal to refuse to sell or to export

or divert petroleum products or natural gas supplies with the intention of increasing prices or creating a shortage in a geographic market. In evaluating whether a marketer has illegal intent, a court must consider whether the cost of the products has increased, and if the defendant has obtained a higher price in the market to which the product has been exported or diverted.

The bill has the potential of interfering with legitimate business decisions that are made by individuals in the oil and natural gas industry. Unilateral decisions to move supplies from one area to another based on supply and demand issues could be challenged under this provision. Moreover, the bill makes it illegal to "intend" to take certain actions even if the entity does not have the ability to impact supplies or prices and there is no showing of an actual or likely anticompetitive effect. This is contrary to traditional antitrust analysis. In addition, Section 2 is ambiguous and contains a variety of key terms such as "divert" that have not been defined. As a result, there could be significant questions related to compliance and enforcement. This uncertainty could adversely affect legitimate business decisions related to supply and ultimately have an adverse impact on consumers. Finally, the bill does not identify who has standing to enforce the provisions of the bill.

If enacted, Section 2 could have a chilling affect on the oil and gas industry, make it more difficult for the industry to meet the fuel needs of U.S. consumers, and prevent the industry from responding quickly to emergencies such as those that occurred with Hurricanes Katrina and Rita.

### Fuel transitions

Complicating the overall U.S. fuel supply/demand situation are numerous contributing factors. The Energy Policy Act of 2005 eliminated the reformulated gasoline (RFG) oxygen requirement, and also set a new renewable fuel standard, requiring that the industry use 4 billion gallons of renewable fuel in 2006 – increasing to 7.5 billion gallons in 2012 and increased amounts thereafter. In addition, ultra-low sulfur diesel (15 ppm sulfur) will be introduced starting June 1.

Eliminating the RFG oxygen requirement is a change in the law that the industry has long supported as one that will add to refiners' flexibility to produce gasoline and allow those who so choose to eliminate the use of MTBE in gasoline. Similarly, the introduction of ultra-low sulfur diesel, despite the \$8 billion in costs incurred by the nation's refiners, will have major benefits and is strongly supported by the U.S. oil and natural gas industry. However, both of these are major fuels changes and present significant challenges to fuel providers. Our companies are dedicated to ensuring that these transitions go smoothly as possible and are making the substantial investments required to complete these transitions.

API believes that, to be successful, fuel transitions should be based on the free and unfettered functioning of fuel markets. Market mechanisms are most effective in providing companies with appropriate indicators and in ensuring a rapid response to changes in market conditions or transitional problems that may occur. Changes to these market indicators by government – such as calling for waivers from clean fuel regulations in light of concerns about possible volatility in fuel prices – will only cause market uncertainty and send confusing information to markets in transition. There are already mechanisms in place to deal with true market supply disruptions, and we urge the government to use appropriate caution in exercising this existing authority.

Operating in a free marketplace, the U.S. oil and natural gas industry has the technical expertise and decades of experience in successfully handling fuel specification transitions. Our companies have repeatedly demonstrated their capability for making these transitions on the national level in dealing with RFG, low-sulfur gasoline and diesel fuel and in meeting so-called "boutique fuels" requirements at the state level.

Since the Energy Policy Act of 2005 did not provide for a national, ordered phaseout of MTBE, individual companies made individual decisions on how best to deal with the end of the RFG oxygen mandate and the use of oxygenates. Companies took into account various factors such as customer preference, state laws, pipeline decisions, distribution system capabilities, and information from government agencies such as EIA.

U.S. oil and natural gas companies have the expertise, experience, and resources required to make the fuel transitions that are required – provided fuel markets are allowed to function freely. We think a valuable role for the government is to help create as clear and transparent a picture as possible of what is occurring in the marketplace during this summer's upcoming transitions. In this vein, we strongly support continued efforts by EIA to monitor the supply and demand dynamics of the market, and provide timely updates to their initial study. API and its members are very willing to cooperate in any such effort.

### **Boutique Fuels**

While the patchwork of localized "boutique fuels" is not principally responsible for the recent higher gasoline prices, the proliferation of these fuels in recent years has presented significant challenges to U.S. refiners and resulted in an inflexible fuel system. (See the attached map of boutique fuels.)

Boutique fuels contribute to the tight supplies and price volatility so decried by consumers. A classic example of the disadvantage of boutique fuels is in the Atlanta area, which has a one-of-a-kind gasoline blend in the summer. Most gasoline on the major pipelines that service Atlanta cannot be used to address any supply shortage in that market. Refiners and suppliers have made the refinery and distribution system investments to handle the Atlanta gasoline. However, if a serious infrastructure problem occurs in the refineries, the pipelines, or the terminals that supply this area with gasoline, the boutique fuel involved could lead to serious supply disruptions.

Of utmost importance in our business is the reliability of supply. Fuel providers need the flexibility to get fuel to where it is most needed and to quickly adjust to changes in demand. Additionally, marketers need some assurance that, if they do not have access to a particular supplier or terminal, they will be able to go elsewhere for product. However, a rigid system of state-specific boutique fuels reduces the reliability of supply and increases the risk of spot shortages and price volatility.

Our industry has worked long and hard to discourage the spread of boutique fuels. Some success was realized when the Energy Policy Act of 2005 included a provision requiring EPA to publish a list of fuels identified in state implementation plans, with states barred from adopting new formulations unless they were to replace one fuel on the list with another on the list. These provisions clearly indicated that policy-makers were finally recognizing the harmful effects of widespread adoption of boutique fuels.

API supports the boutique fuels provisions in the Energy Policy Act as they should help address the issue by limiting the number of fuels that states may adopt. In addition, EPA and DOE are directed to undertake two studies. The first is due to Congress August 8, 2006 and is a study about the effects of SIP-adopted fuels programs on air quality, the number of fuel blends, fuel availability, fungibility and cost.

The second study on "Fuel System Harmonization" is due June 1, 2008. This report is to contain recommendations for legislative and administrative actions that may be taken to improve air quality, reduce costs to consumers and producers and increase supply liquidity. DOE and EPA are directed to consult with Governors, automobile manufacturers, state and local air pollution regulators, public health officials, motor fuel producers and distributors, and the public. Last week, EPA announced that it has begun a dialogue with Governors to discuss boutique fuels, and we believe this is an important step in Congress's desired consultation process. API looks forward to providing input to this process.

The results of these required studies should provide guidance to Congress as to whether further steps should be taken regarding boutique fuels.

### Ethanol and Boutique Fuels

Some are erroneously claiming that our industry is "opposed to ethanol" and is doing all it can to discourage its use. We believe that America needs all the energy resources it can obtain, and that ethanol is one of those resources. Our industry supports the use of ethanol as a valued gasoline additive. In our view, ethanol is here to stay, and it is a very important part of the nation's gasoline pool. In fact, in many regions of the country, consumers are already driving on a mixture of gasoline with 5.7 percent to 10 percent ethanol.

However, we need to keep in mind that no energy alternative is a panacea. Each has its plusses and minuses, but they can each play an important role. For example, based on various studies, the energy savings from corn-based ethanol are moderate – 3 to 20 percent – because production from corn requires significant energy input. And, Dow Jones News Service reported on May 1 that Warren Staley, Chairman and Chief Executive Officer of Cargill, Inc., estimated that, even if 100 percent of the U.S. corn crop were used to produce ethanol, it would only replace about 20 percent of motor fuel.

Some ethanol proponents are focused almost exclusively on E-85 fuel, which consists of 85 percent ethanol and 15 percent gasoline. While the industry does not object to E-85, so long as it meets technical specifications and is of reliable quality, a sole national focus on growing ethanol volumes through E-85 is a risk-laden approach to achieving significant growth in ethanol.

A couple of points are worth noting in that regard:

- Of the 169,000 retail gasoline marketing outlets, only 600 are currently equipped to distribute E-85, and these are concentrated principally in the upper Midwest where the corn crop grows; and
- Currently, there are about 6 million flex-fuel vehicles (FFVs) on the road (3 percent of the fleet) and, even if that number increases by 1 million per year over the next several years, the percent share of the fleet would still be small. For example, 10 million FFVs in 2010 would be 4 percent of the fleet; 15 million in 2015 would be between 5 and 6 percent. It is important to understand that the 97 percent of the fleet today not designed to operate on fuels containing more than 10 percent ethanol could well incur damage by using higher ethanol blends a fact rarely mentioned by "E-85 only" proponents.

Industry is concerned that, were government and key opinion leaders to place the entire focus for success in introducing ethanol on the number of new E-85 outlets, it will be the football equivalent of throwing a Hail Mary pass as the last play of the game -- and the odds for success will be equally as long.

Our industry's prescription for success with ethanol is to concentrate on ethanol integration into the full gasoline pool and to permit E-85 to grow in those locations where it meets the test of the commercial and regulatory marketplace.

We also think that individual states should not force the use of ethanol by devising their own blend of gasoline/ethanol mandates. The last thing our nation needs now is an expansion of the boutique fuels patchwork of state-by-state laws by mandating ethanol use at different concentrations and/or under different terms. Integrating ethanol into the gasoline marketplace is too important – and presents too many challenges – to be approached in an individual, state-by-state manner. In order to meet consumer fuel needs, we want to produce more, refine more, and distribute more – but state ethanol mandates would make this difficult. Ethanol cannot be moved by common carrier pipeline, as is more than 70 percent of U.S. oil products, and requires a long supply chain to serve consumers. That means a longer reaction time when problems occur. State ethanol

mandates would significantly add to that reaction time. We oppose this patchwork approach, whose adverse impacts are felt most by individual gasoline consumers.

What we do support is the uniform national plan enacted last year that will integrate more ethanol into the nation's gasoline pool at concentrations of up to the maximum permissible 10 percent per gallon, which can be utilized in the entire U.S. automotive fleet without vehicle modifications.

### **Earnings**

There is considerable misunderstanding about the oil and natural gas industry's earnings and how they compare with other industries. The oil and natural gas industry is among the world's largest industries. Its revenues are large, but so are its costs of providing consumers with the energy they need. Included are the costs of finding and producing oil and natural gas and the costs of refining, distributing and marketing it.

It should not be forgotten that the energy Americans consume today is brought to us by investments made years or even decades ago. Today's oil and natural gas industry earnings are invested in new technology, new production, and environmental and product quality improvements to meet tomorrow's energy needs. *Oil & Gas Journal* estimates that the industry's total U.S. reinvestment in 2006 will reach \$124.1 billion, compared with \$115 billion in 2005 and \$102.4 billion in 2004. This represents an increase of 21 percent in just two years. *Oil & Gas Journal* also estimates that exploration and production spending in the U.S. will grow 11.8 percent this year and that total upstream oil and gas spending will reach nearly \$88.9 billion. A single deepwater production platform can cost more than \$1 billion.

Moreover, since 1992, the five largest U.S. oil and natural gas companies have reinvested more than their total net income. Between 1992 and 2005, the industry invested more than \$1 trillion – on six continents – in a range of long-term energy initiatives: from new exploration and expanding production and refining capacity to applying industry leading technology. In fact, over this period, our cumulative capital and exploration expenditures exceeded our cumulative earnings.

Figures on earnings from investment show clearly that the oil and natural gas industry is in line with other industries. The U.S. Energy Information Administration reports that in 2004 (the latest available data), the return on investment – specifically, the net income divided by net investment in place – was 18.9 percent for the oil and gas industry and 17.4 percent for the S&P Industrials. From 2000 to 2004, the average was 13 percent for the oil and gas industry and 12.5 for the S&P Industrials. And from 1995 to 2004, oil and gas realized 10 percent compared to 13.9 for the S&P Industrials.

Furthermore, the industry's future investments are not focused solely on traditional hydrocarbon projects. It is important to note that – from 2000 to 2005 – the oil and natural gas industry invested \$98 billion in emerging energy technologies, including renewables, in North America alone – this investment represents 73 percent of the total \$135 billion spent by all U.S. companies and the federal government. For example, one oil company is among the world's largest producers of photovoltaic solar cells; another oil company is the world's largest developer of geothermal energy; and the oil and gas industry is the largest producer and user of hydrogen.

It also requires billions more dollars to maintain the delivery system necessary to ensure a reliable supply of energy and to make sure it gets where it needs to go: to industry customers. Americans' energy use is expected to grow by one-third in the next 25 years. The industry is committed to making the reinvestments that are critical to ensuring our nation has a stable and reliable supply of energy today and tomorrow.

The industry's earnings are very much in line with other industries – and often they are lower. This fact is not well understood, in part, because the reports typically focus on only half the story – the total earnings reported. Earnings reflect the size of an industry, but they're not necessarily a good reflection of financial performance. Earnings per dollar

of sales (measured as net income divided by sales) provide a good way to measure how industries perform compared to other industries. It is a figure that is the most widely understood and relevant to consumers interested in knowing how much companies earn for every gallon of gasoline sold.

Last year, the oil and natural gas industry earned 8.5 cents for every dollar of sales compared to an average of 7.7 cents for all U.S. industry. Over the last five years (2001-2005), the oil and gas industry's earnings averaged 5.9 cents compared to an average for all U.S. industry of 5.6 cents.

It is also important to understand that those benefiting from healthy oil and natural gas industry earnings include numerous private and government pension plans, including 401K plans, as well as many thousands of individual American investors. While shares are owned by individual investors; firms, and mutual funds, pension plans own 41 percent of oil and natural gas company stock. To protect the interest of their shareholders and help meet future energy demand, companies are investing heavily in finding and producing new supplies and in new refinery capacity.

### Windfall profits tax

The U.S. oil and natural gas industry is not earning "windfall profits." As explained in the previous section, the industry's earnings have been very much in line with those of other industries, and often are lower.

A "windfall profits" tax (WPT) discourages new domestic oil production, and makes it more attractive to produce foreign energy resources – thereby increasing our dependence on imported oil. The Congressional Research Service (CRS) concluded that, between 1980 and 1986, the WPT reduced domestic oil production by as much as 1.26 billion barrels. In all, the CRS estimated that the WPT caused domestic oil production to fall between 1 percent and 5 percent, and caused oil imports to rise between 3 percent and 13 percent (1980-86).

Adopting such a tax, even one that exempts new domestic investment, would set a precedent that could have a chilling effect on investment in U.S. energy development, since investors would be concerned that the tax eventually could be imposed on revenues from new domestic production as well.

The WPT in the 1980s, combined with subsequent low oil prices, led to 20 years in which the domestic oil and gas industry was not able to attract sufficient capital for investment, which is contributing to the tight supply markets of today. According to the CRS, before the WPT was repealed in 1988, it generated about \$38 billion in net revenues (\$80 billion in gross revenues)—money that could have been used by the industry to invest in new energy production and infrastructure. The National Petroleum Council projects that producers will have to invest nearly \$1.2 trillion through 2025 to fund U.S. and Canadian natural gas exploration and production activities. Investments of this magnitude require long-term fiscal stability.

The Congressional Budget Office (CBO) estimated that the energy sector sustained between \$18 billion and \$31 billion in capital losses from Hurricanes Katrina and Rita. These costs will be in addition to the new capital investments that will be required of the oil and gas industry to meet future U.S. energy demand.

The recent increase in crude oil prices should encourage greater production from existing U.S. resources and promising new, but costly, alternative sources of energy. Those increased supplies could help to reduce energy costs in the long run. A WPT could reverse that trend toward expanded production of new resources, by making many of those high-cost alternatives non-economic to produce in the United States. For example, a company that invests in the development of oil from shale could make little or no profit, and still pay a significant windfall profit tax.

Domestic oil and gas companies, which are already heavily taxed relative to their foreign competitors, must compete for foreign investment opportunities with those

competitors. The WPT would increase this already substantial tax burden and reduce the ability of domestic companies to compete for those foreign investment opportunities needed to diversify our nation's energy supply and, in turn, support the employment of U.S. personnel in jobs related to those activities both here and abroad.

Almost all large oil and gas companies are publicly-traded entities, whose shares are owned by millions of investors through their 401(k)s, retirement plans and pension funds. Taxing away the earnings of those companies negatively impacts the ability of hardworking Americans to achieve a more financially secure future. Moreover, taxes, not unlike amounts paid for raw materials and employee salaries, are a cost of doing business and are ultimately reflected either in the price paid by consumers for a company's products (e.g., gasoline and heating oil) or in reduced returns to shareholders.

### Fuel prices: what can be done?

In attempting to meet the fuels challenges we face, it is important to do no harm. The worst thing Congress could do now would be to repeat the mistakes of the past by overriding the structures of the free marketplace. Imposing new controls, allocation schemes, new taxes on industry, or other obstacles will only serve to make the situation much worse.

Because the market remains healthy and competitive, it is imperative that it be permitted to continue functioning as freely of artificial restraints as possible. As we have consistently maintained, the answer to our energy situation is to increase supply, reduce demand, and expand and diversify infrastructure. The nation also needs to increase energy efficiency in all sectors of the economy, including transportation.

The Energy Policy Act of 2005 signals a first step in a much-needed effort to enhance energy security and ensure the reliable delivery of affordable energy to consumers. Nevertheless, much remains to be done.

We can no longer afford to place off limits vast areas of the Eastern Gulf of Mexico, off the Atlantic and Pacific coasts, and offshore Alaska. Similarly, we cannot afford to deny Americans consumers the benefits that will come from opening the Arctic National Wildlife Refuge and from improving and expediting approval processes for developing the substantial resources on federal lands in the Mountain West.

In fact, we do have an abundance of competitive domestic oil and gas resources in the U.S. According to the latest published estimates, there are 112 billion barrels of oil and 656 trillion cubic feet (Tcf) of natural gas remaining to be discovered in the United States. Consider that 112 billion barrels are enough oil to power more than 60 million cars for 60 years and heat more than 25 million homes for 60 years. And 656 Tcf is enough natural gas to heat 60 million homes for 160 years.

Much of these oil and gas resources – 78 percent of the remaining to be discovered oil and 62 percent of the gas – are expected to be found beneath federal lands and coastal waters. Federal restrictions on leasing put significant volumes of these resources off limits, while post-lease restrictions on operations effectively preclude development of both federal and non-–federal resources. Addressing these restrictions is critical.

And, while we must focus on producing more energy here at home, we do not have the luxury of ignoring the global energy situation. In the world of energy, the U.S. operates in a global marketplace. What others do in that market matters greatly.

For this country to secure energy for our economy, government policies must create a level playing field for U.S. companies to ensure international supply competitiveness. With the net effect of current U.S. policy serving to decrease U.S. oil and gas production and to increase our reliance on imports, this international competitiveness point is vital. In fact, it is a matter of national security.

Ten of the 12 largest oil companies in the world are controlled by foreign governments, and only one of the two investor-owned companies in the top 12 – ExxonMobil – is American. Based on potential oil and gas reserves – resources essential

for future operations — only one of the 16 largest oil companies in the world is headquartered in the U.S. Most of the others are national oil companies owned by foreign governments. Nearly 80 percent of the world's reserves are owned by these national oil companies, and a mere 6 percent are owned by investor-owned companies.

While our nation is going through challenging times at the gasoline pump right now, it is important to understand how we operate in a global commodity business, and that these same problems are being experienced worldwide. It is critically important to note that the oil and gas price changes over the last two decades are in line with, and in some cases lag behind, other commodities. Thus, oil and gas price trends are not anomalies.

#### Refineries

In considering the U.S. refining situation, it is also important to remember that the oil and natural gas industry operates in a global marketplace. Many oil and gas companies are global companies, whose U.S. investment decisions compete not only with decisions as to how to allocate capital investments in the U.S. among various sectors of the industry, but also with competing demands and investment needs overseas. In a global marketplace, companies will make the best economic investment decisions in order to bring affordable petroleum products to consumers. Imports may be the more economical option than new U.S. refineries, but that is a decision to be left to the global marketplace. Government policies should encourage, not interfere with, the global marketplace.

While domestic refiners have strived to increase the efficiency, utilization and capacity of existing refineries, these efforts have not enabled the U.S. refining industry to keep up with growing demand. Imports have been helping to meet the growing U.S. demand, although announced capacity additions through 2011 will exceed historic demand increases. We have been importing an average of about 10 percent of our gasoline nationally for the past three years into PADD 1 (East Coast) where the harbors have facilitated imports.

During the 1990s, the oil and natural gas industry earned relatively poor rates of return on its investments. This was especially true in the refining sector, which was hard hit with the need for new investment in technology and equipment to produce cleaner-burning fuels, as well as additional emissions control technology on the refineries themselves, to meet clean air standards set by the Clean Air Act of 1990. This Act had a major impact on the operation of refineries in the United States and the return on investment realized at the time.

Technological advancements have helped refineries produce more from existing facilities than they did in the past. In addition, the elimination of subsidies under government regulations after 1981 led to the closure of many smaller, less efficient refineries throughout the 1980s and 1990s. Those refineries left standing did a better job of bringing product to market for less.

The last two years have been extremely challenging for consumers and refiners. The industry has been working very hard to meet the needs of consumers. In 2004, the refinery system set records for production of gasoline and diesel fuel. In 2005, about 30 percent of the U.S. refining industry was shut down at one point as a result of Hurricanes Katrina and Rita. The industry is resourceful and quickly imported record amounts of gasoline and diesel fuel to augment this production to meet all-time high consumer demand and limit supply disruptions.

Massive investments at refineries will be required in the next 10 years to expand refinery capacity to meet growing demand and to comply with environmental regulations. Domestic refining capacity has increased over the last decade to about 17 million barrels per day and several capacity expansion projects are currently underway. Though the actual number of refineries has decreased, actual refining capacity has been growing.

While no new refineries have been built in the U.S. since 1976, expanding and upgrading existing refineries is an ongoing process. The U.S. refining industry has been expanding a little more than 1 percent per year over the past decade – the equivalent of 12 new 200,000-barrels-per-day refineries. And it continues to grow.

Based on publicly available data on announced refinery capacity expansion plans, over 1.3 million barrels per day of additional refinery capacity projects are either planned or under strong consideration for the years 2006 to 2011. Such expansions will boost domestic refining capacity to nearly 18.5 million barrels per day - near the all-time high for U.S. operable refinery capacity. (This aforementioned information covers only expansion plans announced to the public; additional plans may be under initial consideration or kept confidential.)

Some recent examples of refinery capacity expansion plans mentioned in publicly available information and individual company press releases include:

- ConocoPhillips plans to invest \$4 billion to \$5 billion by 2011 for expansion and upgrade projects in nine refineries to increase its U.S. refining capacity and improve utilization. An overall capacity increase of 230,000 barrels per day is planned, with 40,000 barrels per day of added crude capacity to its Los Angeles refinery.
- Marathon Petroleum Company is evaluating a \$2.2 billion investment to increase the capacity of its Garyville, Louisiana refinery by 180,000 barrels per day to a total of 425,000 barrels per day.
- Sunoco plans to invest \$1.8 billion over the next three years in its refineries, with an emphasis on increasing capacity by 11 percent to one million barrels per day.
- Valero plans to increase its North American refining capacity by 400,000 barrels per day the equivalent of two mid-sized refineries by 2009 at a cost of \$5 billion.
- Motiva (a Shell and Saudi Refining joint venture) completed initial project scoping and process design for a potential 325,000 barrels-per-day/ \$3.5 billion expansion project being considered at its Port Arthur, Texas refinery.

Increasing capacity at existing refineries can be a challenge for a number of reasons. These challenges are typically even more difficult when building new refineries. A new refinery location must have access to crude and product pipelines and other utilities to obtain the multitude of required permits, gain community acceptance, and attract the significant capital investments to design, permit, and construct. Take the effort to build a new refinery in Arizona, for example: the project has been under development for more than a decade, the site for its location was moved, and, while EPA issued its air permit last year, the project has not been able to attract the financial capital necessary to start construction.

Some obstacles to additional capacity expansion or new refineries include:

- Huge capital investments, often running into the tens to hundreds of millions of dollars for existing refineries (\$9,000-\$12,000 per daily barrel to expand), and \$2 billion to \$3 billion or more for a new refinery (\$17,000 per daily barrel to build new);
- The return on capital investment for petroleum refining and marketing was 7.7
  percent between 1995 and 2004, which is below the average return of 13.9
  percent for the S&P Industrials, according to the U.S. Department of Energy. In
  addition, it takes several years to realize a return on a refinery investment.
- The permitting process required to construct new refineries or modify existing facilities is very complex and time-consuming, involving federal, state, and local permitting authorities;

- The combination of regulations to reformulate fuels and those aimed at reducing emissions from refinery operations make the refining industry one of the most heavily regulated industries in the U.S.;
- The refining industry has spent more than \$47 billion over the last decade to comply with environmental and fuels regulations nondiscretionary expenditures that generally yield little or no return on investment. Moreover, by 2010, the U.S. refining industry will have invested upwards of \$20 billion to comply with new clean fuel regulations. All this investment results in severely reduced funding available for discretionary capacity expansion projects.
- Public opposition to siting a new refinery in almost any community in the U.S. is highly likely, an obstacle difficult to overcome.

In order to further increase U.S. refining capacity, government policies are needed to create a climate more conducive to investments in refining capacity. Many of the steps the federal government could take to help the refinery capacity situation are covered in the December 2004 National Petroleum Council (NPC) study, Observations on Petroleum Product Supply – A Supplement to the NPC Reports "U.S. Petroleum Product Supply – Inventory Dynamics, 1998" and "U.S. Petroleum Refining – Assuring the Adequacy and Affordability of Cleaner Fuels, 2000."

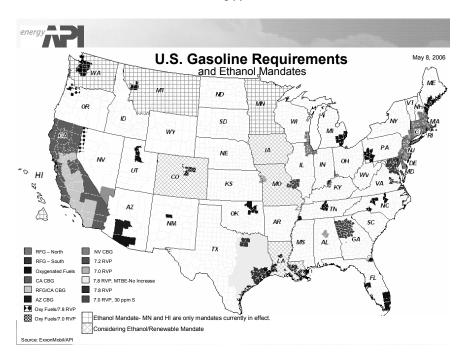
The NPC study suggested that the federal government should take steps to streamline the permitting process to ensure the timely review of federal, state and local permits to expand capacity at existing refineries. For example, new-source review (NSR) requirements of the Clean Air Act need to be reformed to clarify what triggers these reviews. Some refineries may be able to increase capacity with relatively minor adjustments, but are unsure if the entire facility's permit review would be triggered – a burdensome and time-consuming process.

The best long-term solution is investment toward finding new supplies and continuing to improve efficiency when producing and using energy. Decisions about how much capacity is needed and where it is needed are best left to the marketplace. There is spare global refining capacity, and it is important to remember that the oil and natural gas industry operates in a global market. It is important that government policies not interfere with the global market.

### Conclusion

The U.S. oil and natural gas industry is doing all it can to produce the fuel supply needed to meet consumer energy needs. However, the industry cannot meet U.S. energy challenges alone. Our nation's energy policy needs to focus on increasing supplies; encouraging energy efficiency in all sectors of the economy, including transportation; and promoting responsible development of alternative and non-conventional sources of energy.

Congress needs to allow the oil and gas industry to invest today's earnings in meeting tomorrow's energy needs. To do otherwise will threaten our energy future. Congress can help by opening up more of the resource-intensive areas in our nation that are off-limits to new production. Because the market remains healthy and competitive, it is imperative that it be permitted to continue functioning as freely of artificial restraints as possible. That is the most efficient way to provide affordable fuel to meet U.S. consumer needs.



CHAIRMAN BARTON. We now want to hear from you, Mr. Dinneen. Your statement is in the record, and you are recognized for 7 minutes.

MR. DINNEEN. Thank you, Mr. Chairman, and good morning. This is indeed an important and timely hearing, and I am pleased to be here to discuss the unprecedented growth in the domestic ethanol industry and the role that ethanol has played in helping refiners cost effectively replace MTBE in those areas where it is still being used.

Today's ethanol industry consists of 97 biorefineries located in 19 different States with the capacity to process more than 1.7 billion bushels of grain into nearly 4.5 billion gallons of high-octane, clean-burning motor fuel and 9 million metric tons of livestock and poultry feed. It is a dynamic and growing industry that is revitalizing rural America, reducing emissions in our Nation's cities, and lowering our dependence on imported petroleum.

Mr. Chairman, in large part because of the Energy Policy Act of 2005, the U.S. ethanol industry is today the fastest growing energy resource in the world. With your leadership and the tremendous support of members of the committee like Mr. Shimkus, the Congress last year enacted an historic renewable fuels standard requiring the use of at least 7 1/2 billion gallons of renewable fuels by 2012. That provision signaled a clarion call to the ethanol industry and the financial community. The

demand for ethanol and biodiesel was no longer uncertain, allowing the renewable fuels industry to grow with confidence. And grow we have.

There are currently 35 plants under construction. Twenty-one of those have broken ground just since last August, when President Bush signed EPAct into law. With existing biorefineries that are expanding, the industry expects more than 2.2 billion gallons of new production capacity to be in operation within the next 12 to 18 months, 500 million gallons by July 4<sup>th</sup>, another 900 million gallons by Christmas, and it will just continue to grow after that.

As the industry grows, it is changing as well. We are embracing new technologies. Each new plant that opens up is using the newest most cost effective and energy efficient technologies, and that will continue to be the case as well. Because we are expanding at such an unprecedented rate, we are actually exceeding the RFS requirement of 2006 by 25 percent. The RFS requires just 4 billion gallons of ethanol to be used this year, but we will produce and sell more than 5 billion gallons this year.

Ethanol supply is not a problem. Because we have grown so rapidly, we have been able to meet even higher demand for ethanol than required by the RFS, as refiners have chosen to remove MTBE from gasoline. With increased productions, increased imports, and some market reallocation of ethanol, refiners have now largely succeeded in transitioning away from MTBE to ethanol. Again, ethanol supply has not been a problem in meeting the increased demand from MTBE replacement.

Getting ethanol to where it needs to be has also not been a problem. While ethanol is not shipped today on pipelines, the industry has created a virtual pipeline through aggressive use of rail, barge, and trucks to move ethanol quickly anywhere it needs to go. Indeed, by not moving our product on the pipeline, and adding to gasoline supplies at the terminal gate, consumers may ultimately benefit because the pipelines will have more capacity to move more gasoline to those areas.

Refineries made the decision to remove MTBE from gasoline. No provision of the Clean Air Act or the energy bill compelled them to do it. But having made that decision, I give them great credit for working with our industry and the gasoline distribution system to assure that adequate infrastructure exists to make the transition successful. While there were very temporary challenges in a few locations, created by EPA regulations prohibiting commingling of RFG and RBOB, those minor transitional issues were addressed and the switch from MTBE to ethanol is now largely complete. The system works.

Some have suggested that repealing the secondary tariff on imported ethanol is necessary to increase supplies and reduce gasoline prices. But,

as noted, there is no shortage of ethanol. In part, because imports are already coming into the market. The U.S. imported 130 million gallons last year and looks to import even more this year. The secondary tariff is not a barrier to entry.

In fact, most ethanol does come into the country today duty free under preferential trade agreements such as the Caribbean Basin Initiative. Moreover, incremental increases in ethanol supply would have no impact on gasoline prices. Removing the tariff would have an impact on the investment community, however, sending a mixed and chilling signal to the financial community just as ethanol, including cellulosic ethanol, is beginning to take flight.

Mr. Chairman, I appreciate the opportunity to be here today, I appreciate your leadership on last year's energy bill, and I look forward to continuing to work with you and our refiner and gasoline marketing customers to continue to provide high-quality, cost-effective motor fuels across the Nation.

Thank you.

CHAIRMAN BARTON. Thank you.

[The prepared statement of Bob Dinneen follows:]

PREPARED STATEMENT OF BOB DINNEEN, PRESIDENT AND CEO, RENEWABLE FUELS ASSOCIATION

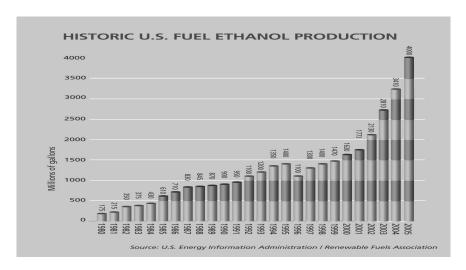
Good morning, Mr. Chairman and Members of the Committee. My name is Bob Dinneen and I am president of the Renewable Fuels Association, the national trade association representing the U.S. ethanol industry.

This is an important and timely hearing, and I am pleased to be here to discuss the unprecedented growth in the domestic ethanol industry, and the attendant economic, energy and environmental benefits resulting from that growth.

Ethanol has become a ubiquitous component of the U.S. motor fuel market. Ethanol is blended in more than 40% of the nation's fuel, and is sold virtually from coast to coast and border to border. As refiners have made the decision to remove MTBE from gasoline, ethanol has been there to replace the lost octane and volume of MTBE, without sacrificing the air quality benefits of the RFG program or increasing consumer costs. The transition from MTBE to ethanol is now largely complete, and is a testament to what can be accomplished when oil refiners, gasoline marketers and ethanol producers work together for the benefit of consumers.

# Background

Today's ethanol industry consists of 97 biorefineries located in 19 different states with the capacity to process more than 1.7 billion bushels of grain into nearly 4.5 billion gallons of high octane, clean burning motor fuel and 9 million metric tons of livestock and poultry feed. It is a dynamic and growing industry that is revitalizing rural America, reducing emissions in our nation's cities, and lowering our dependence on imported petroleum.



The 4 billion gallons of ethanol produced and sold in the U.S. last year contributed significantly to the nation's economic, environmental and energy security. According to an analysis completed for the RFA<sup>1</sup>, the 4 billion gallons of ethanol produced in 2005 resulted in the following impacts:

- Added \$32 Billion to gross output;
- Created 153,725 jobs in all sectors of the economy;
- Increased economic activity and new jobs from ethanol increased household income by \$5.7 Billion, money that flows directly into consumers' pockets;
- Contributed \$1.9 Billion of tax revenue for the Federal government and \$1.6 Billion for State and Local governments; and,
- Reduced oil imports by 170 million barrels of oil, valued at \$8.7 Billion.

In addition, because the crops used in the production of ethanol absorb carbon dioxide, the 4 billion gallons of ethanol produced in 2005 reduced greenhouse gas emissions by nearly 8 million tons.<sup>2</sup> That's the equivalent of taking well over a million vehicles off the road.

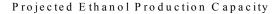
# **Energy Policy Act Has Stimulated Significant New Ethanol Production**

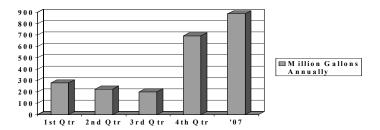
Mr. Chairman, in large part because of the Energy Policy Act of 2005 (EPAct), the U.S. ethanol industry is today the fastest growing energy resource in the world. With your leadership, and the tremendous support of members of the Committee, the Congress last year enacted an historic Renewable Fuel Standard (RFS) requiring the use of at least 7.5 billion gallons of renewable fuels by 2012. That provision signaled a clarion call to the ethanol industry and the financial community that demand for ethanol and biodiesel was no longer uncertain, allowing the renewable fuels industry to grow with confidence.

Indeed, there are currently 35 plants under construction. Twenty-one of those have broken ground just since last August when President Bush signed EPAct into law. With existing biorefineries that are expanding, the industry expects more than 2.2 billion gallons of new production capacity to be in operation within the next 12 to 18 months. The following is our best estimate of when this new production will come on stream.

<sup>&</sup>lt;sup>1</sup> Contribution of the Ethanol Industry to the Economy of the United States, Dr. John Urbanchuk, Director, LECG, LLC, February, 2006.

Argonne National Laboratory, U.S. Department of Energy, GREET Model, February, 2006.





This preceding chart reflects eight plants and three expansions we believe will be complete before July, representing more than 500 million gallons of production capacity; and another 16 plants and 2 expansion that will be complete before the end of the year, adding about 900 million gallons more. This new 1.4 billion gallons of new capacity represents a 32% increase in production, a phenomenal rate of growth, particularly when viewed in light of the 20-plus percent growth the industry has already achieved in each of the past several years.

#### **Rapidly Increasing Demand**

While ethanol supply is growing exponentially, ethanol demand is increasing as well. Indeed, ethanol demand in 2006 is significantly higher than that required by EPAct. The reason for that is refiners have chosen to eliminate the use of MTBE in many of the reformulated gasoline areas where it has not already been removed.<sup>3</sup> Those areas include the Mid-Atlantic, New England and Texas. The Energy Information Administration believes as much as 130,000 barrels per day of ethanol will be needed to meet the demand created by refiner decisions to replace MTBE.

Some have questioned the ability of the ethanol industry to meet such rapidly increased demand. But given the tremendous growth in ethanol production capacity cited above, most analysts now agree there will be sufficient ethanol supplies. For example, Valero Energy CEO William Klesse recently stated, "[t]he US will have enough ethanol to blend into gasoline during the current spike in demand as companies transition away from the oxygenate MTBE."

In addition to increased production, ethanol supplies will flow from existing conventional gasoline markets to MTBE replacement markets where it is needed more.

The market will also encourage increased imports in the short-term. Approximately 130 million gallons of ethanol were imported in 2005, and even higher imports are expected this year. Twenty-five million gallons of ethanol were imported in February alone.<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> It is important to note that no provision of the Energy Policy Act or the Clean Air Act requires refiners to eliminate MTBE, nor are they required to use ethanol. This is a decision refiners are making because replacing MTBE with ethanol is the most cost-effective means of meeting Clean Air Act standards while maintaining the octane and performance consumers expect.

<sup>&</sup>lt;sup>4</sup> Brazil is the world's largest exporter of ethanol, and significant volumes of ethanol come from Brazil directly. Other Brazilian product is imported through the Caribbean Basin Initiative, which allows up to 7% of the U.S. market (~270 million gallons in 2006) to enter duty free. Ethanol produced in Canada and Mexico is also duty-free today.

Approximately 115 million gallons of ethanol per month are required to meet mid-Atlantic and Northeast ethanol demand as MTBE is removed from gasoline. Currently, there is about 95 million gallons of ethanol in working inventory at terminals in this area. That equates to 25 days of demand on hand in the Northeast and mid-Atlantic region. Ethanol supply is NOT a problem.

Some have suggested repealing the secondary tariff on imported ethanol is necessary to increase supplies. But, as noted above, there is no shortage of ethanol. Moreover, the secondary tariff is not a barrier to entry. The secondary tariff merely offsets the tax incentive oil companies receive for blending ethanol, regardless of its source. Eliminating the secondary tariff would only result in U.S. taxpayers subsidizing already subsidized foreign ethanol. At a time when Congress is contemplating reduced domestic farm programs, it is neither wise nor necessary to begin subsidizing foreign ethanol and foreign sugar growers. Finally, eliminating the tariff now, as the financial markets are contemplating significant investments in U.S. ethanol, including cellulosic ethanol, would send a chilling signal to those markets at a critical time and potentially discourage further investment in this promising technology.

## The Transportation, Distribution and Blending Infrastructure will be Ready.

The ethanol industry has worked diligently with our refiner customers, gasoline marketers, terminal operators and the fuel distribution network to assure a successful transition from MTBE to ethanol in these areas.

Over the past several years, the ethanol industry has worked to expand a "Virtual Pipeline" through aggressive use of the rail system, barge and truck traffic. As a result, we can move product quickly to those areas where it is needed. Many ethanol plants have the capability to load unit trains of ethanol for shipment to ethanol terminals in key markets. We are also working closely with terminal operators and refiners to identify ethanol storage facilities and install blending equipment.

Sewaren, NJ is expected to be the primary gathering point for ethanol for East Coast markets in 2006 because it has both unit rail car capacity and marine access. Ethanol will be trucked to serve New York and New Jersey, and product will flow out by barge to Providence, Boston and Baltimore. Additional terminal capacity exists in Albany, Philadelphia, Newark, Paulsboro, Carteret, Perth Amboy, Norfolk, and Richmond.

Great credit must be given to the petroleum industry for the effort that is being made to assure success. Examples of some of the investments being made to accommodate the switch from MTBE to ethanol in key markets include the following:

- Unit Train unloading facilities are either being built or planned for Providence, RI, Linden, NJ, Baltimore, MD, and Dallas, TX. Already, a unit train breakout facility is in operation in Albany, NY.
- Barge receiving capability is either in place or being built in Philadelphia, Baltimore and Houston.
- Transloading (rail to truck) capability is being developed as a transitional step for Richmond, Washington and Dallas. More permanent rail terminals are being developed for these areas.

There is no question that the dramatically accelerated removal of MTBE challenged the marketplace. The EPA requirement to completely drain MTBE-RFG tanks and clean them before loading Reformulated Blendstock for Oxygenate Blending (RBOB) created some difficulties in a few locations. But the problems were very short-lived and the transition is now largely complete. As one industry analyst observed recently, "The very

fact that these companies are on the record as discontinuing MTBE and replacing it with ethanol tells us one very important fact – they are prepared."<sup>5</sup>

#### **New Technologies**

The only thing more astonishing than the growth in the ethanol industry is the technological revolution happening at every biorefinery and every ethanol construction site across the country. Plants today are using such innovations as no-heat fermentation, corn fractionization and corn oil extraction. With today's natural gas prices, plants are also looking toward new energy sources, including methane digesters and biomass gasification. In short, the ethanol industry is unrecognizable from what it was just five years ago, and it will be unrecognizable again five years from now.

To continue this technological revolution, however, continued government support will be critically important. DOE's biomass and biorefinery systems research and development program has been essential to developing new technologies. Competitively awarded grants provided by this program have played a very important role in developing new technology.

Recently, DOE informed the renewable fuels industry that it was canceling research contracts. Many of the grants provide technologically promising projects that would help move the industry forward. The RFA encourages Congress to continue to provide additional funds for competitive solicitations.

#### **New Feedstocks**

To date, the ethanol industry has grown almost exclusively from grain processing. In the future, ethanol will be produced from other feedstocks, such as cellulose. Cellulose is the main component of plant cell walls and is the most common organic compound on earth. However, it is more difficult to break down cellulose and convert it into usable sugars for ethanol. Yet, making ethanol from cellulose dramatically expands the types and amount of available material for ethanol production. This includes many materials now regarded as wastes requiring disposal, as well as corn stalks, rice straw and wood chips or "energy crops" of fast-growing trees and grasses. Cellulosic ethanol production will augment, not replace, grain-based ethanol, but ultimately exponentially expand potential ethanol supplies.

Many companies are working to commercialize cellulosic ethanol production. Indeed, there is not an ethanol biorefinery in production today that does not have a very aggressive cellulose ethanol research program. The reason for this is that they all have cellulose already coming into the plant. If they can process that material into ethanol, they will have a significant marketplace advantage.

Many companies are working to commercialize cellulosic ethanol. Iogen, Inc., a Canadian enzyme company, has been producing cellulosic ethanol from wheat straw since 2004 at a one million gallon plant in Ontario. The company is planning to begin construction of a commercial facility in the U.S. during the summer of 2007. Abengoa Bioenergy Corp., which operates four biorefineries in the U.S. today, has begun construction of a grain and cellulose ethanol plant in Spain. The company plans to bring that technology to the U.S. as soon as the technology is proven successful. Numerous other companies are moving toward commercialization and I am confident cellulosic ethanol will be a reality quite soon.

#### Conclusion

In his State of the Union Address, President Bush acknowledged the nation "is addicted to oil" and pledged to greatly reduce our oil imports by increasing the

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production and use of domestic renewable fuels such as ethanol and biodiesel. The Energy Policy Act of 2005 clearly put this nation on a new path toward greater energy diversity and national security through the RFS. And as the ethanol industry continues to grow, through new technologies and new feedstocks, we will move even closer to realizing the President's vision of a more sustainable energy future for all Americans. Thank you.

CHAIRMAN BARTON. We now want to hear from Mr. Slaughter, who is representing the refiners.

MR. SLAUGHTER. Thank you, Mr. Chairman. Thank you again for the invitation to appear.

The state of the gasoline market today reflects supply and demand, and the arithmetic is not complicated. What is happening is what the textbooks say should happen. With domestic demand for refined products continuing to accelerate, outpacing our ability to meet those needs with domestic supplies, coupled with the ever-increasing global demand for these same products, market volatility will continue.

Although this situation is unsatisfactory, it can only be alleviated and addressed with increased supply. Recent EIA data do suggest improvements in the gasoline supply picture. Gasoline inventories are up for the second straight week, while demand is down. Refinery utilization rose to 90.2 percent due to the end of widespread maintenance resulting from last year's hurricane aftermath. Refiners have also completed both the seasonal product turnaround, and among some, the transition from MTBE to ethanol use and RFG. This should eliminate some of the causes for uncertainty in the market place going forward.

We continue to be concerned, however, about crude price levels, our feedstock, which have increased the cost of refiners' raw material by 40 percent over last year. Regardless of the 2006 demand growth rate, which EIA now puts at 8.9 percent, total demand for gasoline and other products is strong, reflecting continued U.S. economic growth. In short, economic growth in the U.S. and around the world is the major culprit behind today's energy prices and the market situation.

The only things that could significantly affect this strong demand situation are things we don't wish to invite: recession, depression, or a strong shock to the U.S. or world economy due to a calamity like last year's hurricanes or 9/11. These facts lead NPRA to the conclusion that government and industry should act to prepare for continued strong economic growth, both nationally and globally, leading to increasing demand for energy, particularly transportation fuels.

This means continued vigorous competition for available international crude and oil product supplies, particularly gasoline and diesel. U.S. demand for both crude and product will continue to increase, but demand in other countries, especially Asia, will increase at

a faster rate. This means that the United States will face strong competition for available supplies from lean and hungry new players in the marketplace.

The U.S. refining industry is committed to continued heavy investments in projects to increase domestic refining capacity, increase the yield of most desirable products, like gasoline and diesel, per barrel of crude refined, increase the ability of domestic refineries to handle a broader range of crudes, including heavier and sour crudes, as well as crude from oil sands and other nonconventional sources, and continue and expand environmental improvement through production of cleaner fuels and facility improvements and the development and implementation of new technologies.

The U.S. industry has increased domestic refining capacity by 2 million barrels per day in the past 12 years. This is the equivalent of adding almost one moderate-sized refinery each year. This capacity increase was achieved at the same time the industry was also investing billions of dollars to comply with new environmental requirements in the Clean Air Act Amendments of 1990.

I would also point out that mergers and acquisitions in the industry have increased refining capacity. Without such consolidation, some of the individual refineries involved might not have been economically viable. A close examination of mergers and acquisitions indicates that purchased or merged refineries continue to operate and have often been expanded, in Valero's case, adding almost 400,000 barrels a day to the Nation's refining capacity.

Refiners have announced new plans for about 1.4 million barrels per day of additional U.S. refining capacity, most of which will come on line towards the end of this decade. That is an 8 percent increase in U.S. refining capacity. Some analysts believe that that 1.4 million barrel a day figure is a conservative estimate.

Mr. Chairman, I would like to end today by talking about some suggestions we have for policy changes that might be advantageous to the U.S. energy situation.

One, we think it is wise to move ahead with permit streamlining and other ways to eliminate barriers to refinery additions and new refineries. Congress, as part of the Energy Policy Act of 2005, passed an expensive provision for refinery investments. We would recommend that Congress take a look at that approach, perhaps extending the current effect of it to apply it to the needs of new refineries as a way to stimulate new refining investment.

We are in favor of passage, and we hope House passage will come as soon as possible, of this committee's refinery bill, which has already been considered once, and I understand will be brought back shortly.

We do believe you should look at CAFE and tariffs for potential benefits. We think that all tariffs should be looked at, and we think that the ethanol tariff should be looked at. I would say that my good friend, Mr. Dinneen, has just painted a picture of an industry that to me doesn't really seem to need a mandate and a tax credit, State tax incentives, and a tariff barrier, and I welcome your investigation of that need.

We hope that Congress will pay more attention to the supply impacts of new environmental requirements. In the past, Congress has not done that. The impact is that I think we have less refining capacity in the U.S. because we have not been able to make capacity increases, because the investments for environmental measures have crowded out capital that otherwise might have been put into capacity increases.

You have got to remember that every barrel of gasoline that is not produced in the United States, diesel too, is going to have to be replaced by imports because we require more than we can refine here. The competition for those imports of refined products, like gasoline and diesel, is going to heat up just the way the competition for crude has heated up in recent years. You need to remember that when Congress is considering new environmental legislation.

And in closing, I would say that we would hope that everyone would look at the importance of keeping refining an attractive business to invest in. We have a broad community of companies in the refining industry today, some of the biggest in the world, small regional refiners, and big independents. We need to keep the refining industry an attractive investment for companies so we can keep this healthy, vibrant, and competitive industry that we have today.

Thank you, Mr. Chairman.
CHAIRMAN BARTON. Thank you, Mr. Slaughter.
[The prepared statement of Bob Slaughter follows:]

PREPARED STATEMENT OF BOB SLAUGHTER, PRESIDENT, NATIONAL PETROCHEMICAL & REFINERS ASSOCIATION

Chairman Barton, Ranking Member Dingell, and members of the Energy & Commerce Committee, NPRA, the National Petrochemical & Refiners Association, appreciates the opportunity to present its views on the current gasoline market and the role of the domestic refining industry. I am Bob Slaughter, NPRA's President. Our testimony today will concentrate on factors directly impacting the current and projected gasoline supply and the specifications which refiners have been or are obligated to achieve. As you know, NPRA is a national trade association with 450 members, including those who own or operate virtually all U.S. refining capacity, as well as most of the nation's petrochemical manufacturers with processes similar to those of refiners.

#### INTRODUCTION

We may have reached a point in history at which the future welfare of our nation depends on maintaining a stable supply of transportation fuels and other forms of energy at reasonable prices. It very well could also depend upon achieving better mutual understanding between the domestic energy industry (petroleum, natural gas, and refined products) and the public—a community greatly influenced by the deeds and words of Congress.

The state of the gasoline market today reflects supply and demand, and the arithmetic is not complicated. What is happening is what the textbooks say should happen. With domestic demand for refined products accelerating and outpacing our ability to meet those needs with domestic supplies, coupled with the ever-increasing global demand for these same products, market volatility will continue. Although this situation is unsatisfactory, it can only be alleviated with increased supply. In the meantime, policy makers must resist turning the clock backwards to the failed policies of the past. Experience with market interference in the 1970s and 1980s such as price constraints, allocation controls, and punitive taxes demonstrate not only the failure of these programs, but also their adverse impact on both fuel supplies and consumers.

To summarize our message, NPRA urges policymakers in Congress and the Administration to encourage domestic production of an abundant supply of petroleum, oil products, and natural gas for U.S. consumers. Rather than engaging in a fruitless search for questionable quick-fix solutions, or even worse, taking actions that could be harmful, we urge Congress, the Administration, and the public to exercise continued patience with the free market system as the nation adjusts to a volatile global energy market. The nation's refiners are working hard to meet rising demand while complying with extensive regulatory controls that affect both our facilities and the products we manufacture.

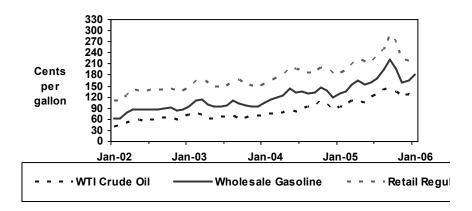
Throughout this statement, NPRA will outline and discuss key factors that provide perspective on the current and future situation the nation confronts regarding the supply of and demand for refined petroleum products.

#### REFINED PRODUCT MARKET FUNDAMENTALS

Any discussion of the domestic refining industry must begin with a description of three fundamental facts that guide refined product markets. These fundamentals are that: 1) the cost of crude oil is the primary driver of the cost of refined product; 2) the balance between supply of and demand for refined products is extremely tight, and; 3) free-market pricing balances the system to the maximum benefit of consumers.

In June of 2005 the U.S. Federal Trade Commission released a landmark study titled: "Gasoline Price Changes: The Dynamic of Supply, Demand and Competition." This study determined that "Worldwide supply, demand, and competition for crude oil are the most important factors in the national average price of gasoline in the U.S." and "the world price of crude oil is the most important factor in the price of gasoline. Over the last 20 years, changes in crude oil prices have explained 85 percent of the changes in the price of gasoline in the U.S." As the chart below clearly demonstrates, the price of crude oil leads the price of wholesale and retail gasoline.

#### Crude Oil and Gasoline Prices



Source: EIA

In addition to the cost of crude oil, the tight balance between refining capacity and refined product demand must be taken into account when to understand price changes. Refiners have been steadily expanding capacity at facilities in order to keep pace with ever-growing demand. Over the past twelve years U.S. refining capacity has increased by over 2 million barrels/day (b/d), the rough equivalent of a new average-size refinery every year. In spite of this growth, refinery utilization rates remain extraordinarily high, often approaching 98% during the summer months. These high rates of utilization reflect the thin margin between supply and demand, which causes even moderate disruptions in the system to be reflected in significant price changes. In addition, the major event of 2005, Hurricanes Rita and Katrina's disruption of key U.S. refined product pipeline service and the destruction of significant portions of Gulf Coast refining assets, caused a temporary but considerable spike in transportation fuel prices.

In spite of the serious damage these storms inflicted on the domestic refining industry, no significant, long-lived transportation fuel shortage occurred during this period. The rapid return to service of significant portions of the transportation fuels industry may be attributed to several factors: quick action by the federal government to waive temporarily regulatory requirements and release crude oil from the Strategic Petroleum Reserve; the efforts of the dedicated employees of the industry, as well as their employers, who managed to return significant assets to service in a short time; and importantly, higher prices. Increased prices, which averaged over \$3.00/gallon nationwide for a brief period, moderated demand and attracted a record amount of refined product imports. As demand declined, imports entered the fuel system, while facilities in areas unaffected by the disaster ramped-up production to provide products for the affected areas. Subsequently, prices moderated and returned to pre-storm levels by the end of November.

Without an increase in price, there would have been little incentive to attract increased amounts of refined products to the United States, or to run refining facilities outside of the affected area at higher utilization rates. Without an increase in prices, long-lived and wide-spread fuel shortages may have occurred. In short, the market worked, to the benefit of consumers and the national economy.

# DOMESTIC REFINING CAPACITY: WORKING TO MEET DEMAND AND IMPROVE THE ENVIRONMENT

148 refineries currently operate in the United States, producing record volumes of some of the cleanest transportation fuels in the world. These refineries, located in 33 states, have a combined capacity of over 17 million barrels per day (b/d) and, as previously stated, often operate at extremely high utilization rates, which approach 98% during the peak driving season. These figures are far above the 82% average utilization rate of other manufacturers. Despite these significant efforts, U.S. product demand continues to outstrip domestic supply. Imports now account for 10% of the gasoline used by U.S. consumers. Regionally, this figure is higher, as in the case of the Northeast, where imported products account for over 20% of total supply. In light of the strong demand for gasoline and other petroleum products, domestic refiners have worked hard to expand existing facilities. Over the past ten years, domestic refining capacity has increased substantially, by an average of 177,000 barrels per day (b/d) of production each year. In simpler terms, this means that the U.S. refining industry has added the equivalent of one new, larger than average refinery, each year for the past decade.

Looking forward, the industry has announced publicly that over 1.4 million b/d in new capacity is slated to come online in the next few years. Some estimates project a possible increase of nearly 1.7 million b/d of capacity over the same time frame. With these expansions, total domestic capacity will reach an all time high as shown in Attachment I.

It remains doubtful, however, that these expansions will be sufficient to meet expected U.S. demand growth, and the nation's continued dependence on imports of finished product and blendstocks will continue.

Capacity expansions have occurred and will continue despite difficult and time-consuming obstacles, including complex permitting requirements and reviews, uncertainties involving the New Source Review program, increasingly stringent environmental requirements, and the difficulties of attracting sufficient investment in one of the most capital-intensive industries. NPRA continues to believe that encouraging the growth of domestic refining capacity is a vital component of U.S. energy policy.

# MERGERS AND ACQUISITIONS HAVE RESULTED IN INCREASED CAPACITY AND COMPETITION

Much has been made of the fact that a new grassroots refinery has not been built in the United States in over thirty years. There are compelling reasons why: obstacles to permitting and constructing such a facility include enormous start-up capital requirements, environmental regulations, a history of low refining industry profitability, and the "Not In My Backyard" (NIMBY) public attitude. Equally important, costs to construct a new grassroots refinery would require an investment averaging \$17,000 per daily barrel of capacity and, at a minimum, would take ten years to complete. On the other hand, capacity expansions at existing facilities cost in the range of \$9,000 to \$12,000 per daily barrel and can be completed in 3 to 4 years. In short, expansions can help meet demand more quickly and cost effectively than construction of a new, greenfield refinery complex. This means more fuel for consumers in a shorter time period than a hypothetical new refinery could provide.

Significantly, while the industry has not constructed new grassroots facilities, improved management techniques and technological advances allow existing facilities to produce ever greater amounts of refined product. As previously mentioned, refiners have added significant capacity at existing sites. In 1981, the average refinery in the United States had approximately 57,000 b/d of crude oil distillation capacity. Today, the average refinery has a capacity of over 110,000 b/d. Due to high capital requirements and increasing environmental restrictions, the industry closed small, inefficient facilities and

has relied on economies of scale to save on construction costs and bring new capacity on line more quickly through expansion at existing sites.

In addition, refiners have also made substantial investments in technologically advanced process units that have increased the yield of gasoline and other valuable "light end" products from the same amount of raw crude input. Further, similar investments have been made in units designed to process a wider slate of crude oil, enabling the production of light products from heavier and sour crude oil feedstocks. Lacking these mergers and acquisitions, some of the individual refineries now operating might not have remained economically viable and the capacity expansions simply could not have been accomplished. One such example is Sunoco's refinery complex in the metropolitan Philadelphia area which now has over 550,000 barrels/day of capacity. If Sunoco were unable to operate these facilities as a synergistic unit, this production might not be available for consumers. Phillips Petroleum's (now ConocoPhillips) acquisition of the Tosco refinery system increased capacity and maintained refinery viability on a nationwide basis, as did Tosco's initial purchase of underperforming facilities. Additionally, Valero Energy Corporation has increased the productive capacity of the refineries it has acquired by an aggregate of nearly 400,000 barrels per day over the past several years and plans more extensive expansions in the future. An examination of other mergers and acquisitions tells the same story: refineries have been kept operating and have often been expanded as the result of mergers and acquisitions.

#### REFINED PRODUCT PRICING: CRUDE OIL & COMPETITION

Two important factors must be kept in mind when examining the price of refined products. First, the cost of crude oil is the single greatest driver of petroleum product prices. In June of 2005 the U.S. Federal Trade Commission released a landmark study titled: "Gasoline Price Changes: The Dynamic of Supply, Demand and Competition." This study determined that "Worldwide supply, demand, and competition for crude oil are the most important factors in the national average price of gasoline in the U.S." and "the world price of crude oil is the most important factor in the price of gasoline. Over the last 20 years, changes in crude oil prices have explained 85 percent of the changes in the price of gasoline in the U.S." According to EIA data, crude oil constitutes 55% of the cost of a gallon of gasoline, refining 22%, taxes 19% and distribution and marketing 4%. Secondly, the refining industry is robustly competitive. Some critics of the industry argue that recent mergers have reduced competitiveness and led to an increase in fuel prices. This assertion is simply wrong. The U.S. refining industry is highly competitive. Fifty-four refining companies, hundreds of wholesale and marketing companies, and more than 165,000 retail outlets compete in the U.S. market. The largest U.S. refiner accounts for just 13% of the nation's total capacity, and large integrated companies own and operate only about 10% of retail outlets. (For comparison, Archer Daniel Midland, the largest producer of fuel ethanol in the U.S., controls nearly 25% of the U.S. ethanol market.) No one company, or group of companies, sets gasoline prices. Rather, the laws of supply and demand drive competitive behavior and determine pricing in the U.S. refining industry.

#### REFINERS REJECT AND CONDEMN IMPROPER PRICING PRACTICES

The tight gasoline markets of the past several years have led to dozens of investigations of the refining industry at the state and federal levels. In each case, the industry has been cleared of wrongdoing. Today, as then, allegations of refiner price-fixing, price-gouging, and other illegal pricing practices are patently false.

Most recently, the Attorney General of Nebraska appointed a task force to investigate prices in that state. In a report issued in January 2006, the task force found that "hurricanes in fall 2005 functioned similarly to OPEC supply restrictions, producing higher prices, lower output, and elevated profits..." Referencing price movements in

recent years the report notes that, "increases in the price of a barrel of oil accounted for 62.5 percent of the rise in gasoline prices between June 2004 and October 2005. Declines in refinery capacity utilization and increases in the share of oil imported accounted for the rest of the difference." Additionally, the task force concluded that similar studies at the federal and state level, "have not found violations of law, and they generally have found competitive markets affected by worldwide conditions."

Another study, conducted by the Office of the Attorney General of Florida, examined price increases in that state in 2004 and found that the major factors affecting prices in that state were: "consumer demand for gasoline," "refinery capacity," "refinery utilization," "inventories," "supply issues," and "lagged response in gasoline imports." Importantly, the study found no evidence of anticompetitive behavior.

These reports repeat the findings of numerous others, including a 9-month FTC investigation into the causes of price spikes in local markets in the Midwest during the spring and summer of 2000. At the conclusion of that investigation FTC Chairman Robert Pitofsky (a recognized expert in antitrust law) stated, "There were many causes for the extraordinary price spikes in Midwest markets. Importantly, there is no evidence that the price increases were a result of conspiracy or any other antitrust violation. Indeed, most of the causes were beyond the immediate control of the oil companies."

NPRA regrets that the results of these investigations, and the findings of those now being requested, have not been and most likely will not be announced with the same enthusiasm and media attention given to news of their initiation.

## ETHANOL & MTBE: A CASE STUDY IN POLICY IMPACTS

Recently, refiners undertook and completed annual turnarounds to prepare for the changeover from wintertime to summertime fuel blends. An unexpected complication for this year's efforts was the need for additional maintenance at facilities damaged by Hurricanes Katrina and Rita, or in the case of one major facility, an accident. In addition, there was a need for deferred maintenance at those facilities originally scheduled for repair work during late summer/early fall of 2005, but which operated at higher rates of utilization and continued to produce fuel for consumers in the aftermath of these storms, while other refineries were shut for storm-related repairs.

While these events could not have been predicted and both industry and government worked diligently to minimize their impacts, the fact remains that both direct actions and overt inaction by the federal government can impact and complicate the supply picture. The results of these policy decisions can and do influence marketplace conditions and volatility. For example, select provisions from the Energy Policy Act of 2005 created marketplace conditions that placed increased strain on the nation's transportation fuels supply.

Although The Energy Policy Act of 2005 eliminated the 2% oxygenate requirement for federal RFG, the act did not provide defective product limited liability relief for MTBE. Further, the rules implementing the removal of the 2% oxygenate requirement were published by EPA just this week, leaving refiners in regulatory limbo regarding RFG and the 2% oxygenate requirement. Refiners were thereby forced to make decisions regarding the transition from the production of wintertime to summertime fuels (required by federal environmental law) in the February/March 2006 timeframe. This situation evidently encouraged many refiners to move ahead quickly to remove MTBE from the fuel supply, to ensure that summertime 2006 RFG would still contain 2% oxygenate to ensure compliance with EPA regulations. This rapid MTBE removal/ethanol switch had been predicted by many industry observers, and Congress was informed on multiple occasions that the failure to adopt MTBE limited liability could impact supply. The result was considerable (but clearly anticipated) pressure on ethanol supply and fuel distribution infrastructure. It is with some irony that we note that those who demanded that MTBE be banned and removed from gasoline as soon as possible are now

questioning the actions of the refining industry as it attempts as smooth as possible a transition to summertime RFG while complying with the renewable fuels (ethanol) mandate also enacted in the Energy Policy Act of 2006.

This substantial increase in demand for ethanol due to MTBE replacement and the mandate caused prices for the blendstock to rise rapidly. At the same time, the logistical challenges of changing from gasoline blended with MTBE to gasoline blended with ethanol (as well as transporting the ethanol to areas for the first time) resulted in unique challenges for a few wholesalers and retailers. Refiners, as well other participants in the transportation fuels industry, worked very hard to minimize these impacts, but they occurred nonetheless. The recent market disruptions were very limited and addressed in short order, and the system is currently adjusting to significantly reduced MTBE use. The experience demonstrates, however, that Congress, in spite of being informed by industry and outside experts and observers, often fails to consider fully the fuel supply impacts of legislation and implementing regulations.

#### OTHER SUPPLY IMPACTS OF REGULATIONS

Other significant government intervention and regulations, especially environmental requirements, have had a major impact on fuel supplies. Unlike most industries, refiners comply with regulations for both their product fuels and for their facilities. In essence, the industry is impacted doubly by many environmental programs and faces numerous other regulatory burdens simultaneously as illustrated by the attached Fuels Timeline (see Attachment II). While refiners support and encourage continued environmental progress, NPRA believes that policymakers have tended to overlook and take for granted the supply side of the environmental-energy equation. It is imperative, in our opinion, that determining the impact on supply must be fully embedded in the policy-making process. In working with policymakers on improvements to fuels and facilities, NPRA has often commented that industry needs time, flexibility or more realistic standards to minimize negative impacts on fuel supply. Policymakers, however, often opt to promulgate regulations that are "technology forcing," constructed with limited and often theoretical "margins of safety," and requiring implementation in the shortest time possible—all without adequate attention to fuel supply impacts.

NPRA characterizes this current environmental agenda as a "regulatory blizzard," consisting of about a dozen new federal programs from 2006-2012 (see Attachment III). The majority of these regulations will have a direct impact on supply. Unfortunately, regulators have not properly sequenced or coordinated the implementation of these requirements, literally stacking them one on top of the other. Current fuel markets reflect, in many aspects, the confluence and impacts of these multiple fuel and stationary source requirements.

## TAKING FUEL SUPPLY FOR GRANTED

NPRA had developed several supply-oriented recommendations to increase supply as the Energy Policy Act of 2005 was debated. Specifically, the Association recommended that Congress repeal the 2% oxygenation requirement for federal RFG; avoid a federal ban or mandatory phase-out of MTBE; resist calls for an ethanol mandate; extend limited product liability protection to MTBE; avoid unnecessary changes in fuel specifications; and take steps to increase natural gas production and supply. Unfortunately, political considerations resulted in the exclusion of most recommendations as part of the Energy Policy Act of 2005.

Our recommendations were supported by two landmark refining studies issued by the National Petroleum Council (NPC), an advisory group to the Department of Energy. The NPC issued a report on the state of the refining industry in 2000, urging policymakers to pay special attention to the timing and sequencing of any changes in product specifications. Failing such action, the report cautioned that adverse fuel supply

ramifications could result. Unfortunately, this warning has been almost totally ignored, resulting in the market volatility we have experienced over the past few years.

On June 22, 2004, former Energy Secretary Abraham asked the NPC to update and expand its refining study and a report was released December 2004. The June 22, 2004 NPC report included the following recommendations: immediate implementation of comprehensive New Source Review reform; revision of the NAAQS compliance deadlines and procedures to take full advantage of emission reduction benefits from current clean fuels and engine programs; caution in implementation of the ultra low sulfur diesel regulations; limited liability protection against defective product claims for MTBE; further study of the boutique fuels issue and approval of new fuels only when cost effective relative to other emission reduction options; regulations based on sound science, cost effectiveness, and energy impacts; streamlined permitting; and several other proposals. Few of the NPC recommendations have been implemented; frankly speaking, policymakers and opinion leaders have almost totally ignored the findings of these important reports.

# CONGRESS SHOULD RESIST CHANGES IN CURRENT FUEL SPECIFICATIONS

As illustrated by the NPRA Regulatory Blizzard and Fuels Timeline cited previously, refiners face numerous challenges and fuel specification deadlines. Further complicating this picture by adding new programs, or even eliminating existing ones, will not benefit consumers. Last minute changes will increase uncertainty and upset expectations based on current law.

## NPRA OPPOSES FURTHER REDUCTIONS OF BOUTIQUE FUELS

Current calls for the reduction of "boutique fuels," for example, may not provide the supply-relief that many advocates think. NPRA believes that any attempt to limit the number of viable fuels in regions or nation-wide may be counter-productive, and certainly no such change would have a positive impact now or during this summer. Boutique fuels programs in many cases represent a local area's attempt to address its own air quality needs in a more cost-effective way than with RFG. While boutique fuels are often blamed for episodic price variations during limited supply disruptions in specific regions, their overall impact on local economics is a net positive when compared to a constant requirement for RFG.

Historically, the primary driver that led local areas to create boutique fuels was to attain the 1-hour ozone NAAQS. When considering fuel controls, such areas often sought to avoid RFG, either due to concerns about 1) cost, or 2) use MTBE and/or ethanol, or both. Areas that may need VOC (hydrocarbon) emissions reductions to achieve ozone attainment have been likely to favor lower RVP controlled conventional gasoline (CG) vs. RFG since low RVP CG is more cost effective. Areas that require NOx emissions reductions to achieve ozone attainment are likely to favor CG as well because both CG and RFG will return similar NOx emission reduction benefits with the implementation of the federal Tier 2 gasoline sulfur program.

Congress passed significant provisions affecting boutique fuels just last year. They have not yet been fully implemented. Clean Air Act section 211(c)(4)(C) was amended by the Energy Policy Act of 2005 requiring a joint effort of EPA and DOE to review motor fuel control choices by states, and further requiring both agencies consider the regional supply implications of such requests (see section 1541 of P.L. 109-58). Before granting a waiver of federal preemption, the Administrator of EPA is required, after consultation with the Secretary of Energy and after notice and comment, to find that the fuel control choice will not cause fuel supply or distribution interruptions, or have a significant adverse impact on fuel producibility in the affected area or contiguous areas.

NPRA strongly supports this important focus on supply-side impacts. Congress should allow time for implementation of this new system before contemplating any changes.

The Energy Policy Act of 2005 includes another provision addressing boutique fuels. Under this provision, EPA may not approve a motor fuel in a new SIP if it increases the number of approved fuels as of September 1, 2004, and unless EPA finds, after review and comment, that the new fuel will not cause supply or distribution disruptions or have an adverse impact on fuel producibility in the affected area or in contiguous areas, and unless the fuel was already in use in the same PADD (with the single exception of summer 7.0 psi RVP conventional gasoline). By November 2005, EPA was to publish a list in the Federal Register of motor fuels in all SIPs as of September 1, 2004, by state and PADD for public review and comment. Additionally, the Act requires a report by August 2006 of a joint EPA/DOE study on boutique fuels, including effects on air quality, fuel availability and fungibility. These provisions have not yet been implemented.

Congress should avoid further confusion and potential disruption in the fuels market and rely on the scheduled joint EPA/DOE study on boutique fuels as a basis for any future legislative initiatives on this subject. In short, NPRA supports further study of the boutique fuels phenomenon as outlined in last year's energy bill, and urges Congress to resist imposition of any additional motor fuel specification changes. Further changes in motor fuel specifications in the 2004 - 2010 timeframe may very well result in additional, unwarranted supply constraints to a situation which already provides significant challenges due to the import of, Tier 2 gasoline sulfur regulations, ultra-low sulfur diesel regulations, revised mobile source air toxic rules, and the impact of revised ozone and particulate matter National Ambient Air Quality Standards, and others (see Attachment III).

Certain actions could be taken by Congress to address the proliferation of fuel formulas without mandating specification changes. Key drivers for future boutique fuel proliferation are the 8-hour ozone NAAQS and PM 2.5 NAAQS. Some areas will doubtless seek to add fuel controls as they develop State Implementation Plans to demonstrate attainment. Many are looking at additional unique requirements for local areas, especially where stationary source options are limited or can't be implemented quickly. Thus, states look to short-term, localized fuel controls to meet excessively compressed NAAQS attainment deadlines. These deadlines are not aligned with federal controls, either existing or in the early stages of implementation (Tier 2 Gasoline & Vehicle standards, Heavy Duty Highway and Non-road Diesel Sulfur standards, etc.). This situation not only prevents states from counting real and significant emission reductions in the time required for compliance, but also adds considerable and unnecessary cost to the overall NAAQS program.

States and local areas need more time to demonstrate attainment or credit for existing regulatory requirements that will deliver emission reductions over time. Congress should direct that states be allowed credit for emission reductions through 2020 resulting from federal fuel control programs already in place. If this is done, much of the interest in and perceived need for states to enact new motor fuel controls will be alleviated.

Further, it is evident that variations in motor fuels may be reduced with implementation of current regulatory programs. For example, EPA published the Mobile Source Air Toxics Phase 2 proposal (71 FR 15804; 3/29/06). The primary feature is a proposed reduction in the average annual benzene content in all gasoline (conventional gasoline plus RFG) to 0.62 vol%. This would eliminate a current toxics control distinction between RFG and CG. Furthermore, the recent removal of the oxygen content requirement for federal RFG reduces the difference between winter RFG and winter CG and between summer RFG and summer 7.0 psi RVP CG. In addition, the average sulfur content of RFG and CG is identical because of the federal Tier 2 Gasoline Sulfur

program. Therefore, differences between RFG and CG are diminishing, which should reduce the attractiveness of new boutique fuels as alternatives to RFG.

In sum, NPRA does not support legislation to address boutique fuels that changes existing specifications. A new legislative menu of motor fuel choices, which NPRA does not support, should in any case recognize investments already made by the petroleum industry to produce boutique fuels and comply with existing mandates. Failure to consider and balance supply implications, as well as air quality impacts, risks making the current supply situation worse.

# EPA SHOULD PROMULGATE RFS STANDARDS THIS YEAR/ CONGRESS SHOULD PREEMPT STATE ETHANOL MANDATES

The Energy Policy Act of 2005 includes a renewable content requirement for motor vehicle fuels, the Renewable Fuels Standard (RFS) provision. The RFS will be administered by EPA and require the increased use of ethanol, biodiesel or other renewable fuels in motor fuels. It is an obligation for gasoline refiners, blenders, and importers. EPA published a Direct Final Rule with a limited set of RFS standards for 2006 that included collective compliance, not individual refinery compliance. This Direct Final Rule was effective on February 28, 2006.

NPRA advocates a program that is understandable, allows unambiguous enforcement, promotes adequate flexibility for refiners and gasoline importers, and is developed with full recognition of its impact on energy supplies. The comprehensive RFS final rule, effective in 2007, should be in place as early as possible before January 1, 2007. Meeting this timetable may be difficult because the Agency has not yet released a proposal for public comment.

Congress set limits on the proliferation of new fuels in the 2005 Energy Policy Act. Unfortunately, new state ethanol, biodiesel or renewable fuel mandates can evade Congressional efforts to limit the number of fuels. These programs should be preempted by the federal Renewable Fuel Standard pending the same energy supply impact analysis required for changes in local gasoline and diesel standards. Congress and the Administration should not grant a free pass to new ethanol and biodiesel mandates that proliferate fuel requirements and negatively impact supply.

### OTHER RECOMMENDED POLICY ACTIONS

Congress can and should take appropriate action to help refiners meet the transportation fuel needs of the American public. Regardless of industry profitability, the simple fact remains that supply and demand for refined products are in an extremely tight balance. The refining industry is still working to recover fully from the impact of Hurricanes Rita and Katrina. Additionally, several upcoming regulatory requirements should be carefully monitored for adverse supply impacts. Necessary and prudent actions include the following:

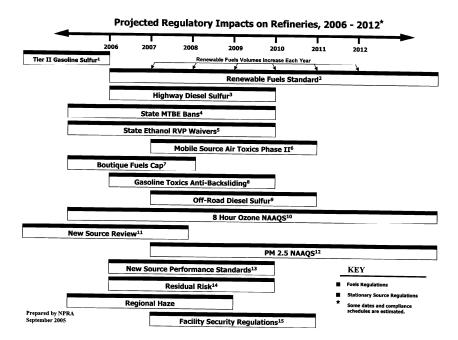
- Make increasing the nation's supply of oil, oil products and natural gas a number one public policy priority. Now, and for many years in the past, increasing oil and gas supply has often been only a secondary concern of policymakers. Oil and gas supply concerns have played second fiddle to whatever policy goal seemed politically popular at the time. As discussed above, the 2000 NPC study of the refining industry urged policymakers to pay special attention to the timing and sequencing of any changes in product specifications. Failing such action, the report cautioned that adverse fuel supply ramifications may result. We repeat that this warning has been widely disregarded.
- Resist tinkering with market forces, including imposition of "windfall profits" taxes, LIFO repeal or elimination of foreign tax provisions. Market interference that may initially be politically popular leads to market inefficiencies and unnecessary costs. Policymakers must resist turning the clock backwards to

the failed policies of the past. Experience with price constraints and allocation controls in the 1970s demonstrates the failure of price regulation, which adversely impacted both fuel supply and consumer cost. The state of Hawaii has just cancelled its less than one-year old gasoline price regulation because it led to higher prices and supply uncertainty. A windfall profits tax would discourage investment in refineries, which is needed to expand domestic production capacity and produce cleaner fuels.

- Remove barriers to increased supplies of domestic oil and gas resources. Refineries and other important onshore facilities have been welcome in limited areas throughout the country, including the Gulf Coast. However, policymakers have restricted access to much-needed offshore oil and natural gas supplies in the eastern Gulf and off the shores of California and the East Coast. These areas must follow the example of Louisiana and many other states in sharing their energy resources with the rest of the nation. This additional supply is sorely needed.
- Expand the refining tax incentive provision in the Energy Act. Reduce the depreciation period for refining investments from 10 to five years in order to remove a current disincentive for refining investment. Consider allowing expensing under the current language to take place as the investment is made rather than when the equipment is actually placed in service. Alternatively, the percentage expensed could be increased as per the original legislation introduced by Senator Hatch.
- Review permitting procedures for new refinery construction and refinery capacity additions. Seek ways to encourage state authorities to recognize the national interest in increased domestic refining capacity by reducing the time needed to permit expansions and other refinery projects.
- Keep a close eye on several upcoming regulatory programs that could have significant impacts on gasoline and diesel supply. They are:
  - Design and implementation of the credit trading program for the ethanol mandate (RFS) contained in the recent Energy Act. This mechanism is vital to ensure smooth implementation without adverse effects on gasoline supply. Refiners have been working closely with EPA to accomplish this key task.
  - Implementation of the ultra low sulfur diesel highway diesel regulation. The refining industry has made large investments to meet the severe reductions in diesel sulfur that take effect in June. We remain concerned about industry's ability to produce the necessary volumes and the distribution system's ability to deliver this material at the required 15 ppm level at retail. If not resolved, these problems could affect America's critical diesel supply. Industry is working closely with EPA on this issue, but time left to solve this problem is growing very short.
  - ➤ Phase II of the MSAT (mobile source air toxics) rule for gasoline. Many refiners are concerned that the proposed regulation could be overly stringent and impact gasoline supply. We hope that EPA will finalize a rule that protects the environment and avoids reducing gasoline supply while protecting the environment.
  - Implementation of the new 8-hour ozone NAAQS standard. The current implementation schedule set by EPA has established ozone attainment deadlines for parts of the country that will be impossible to meet. EPA has not made needed changes that would provide realistic attainment dates. The result is that areas will be required to place sweeping new controls on both stationary and mobile sources in a vain effort to attain the unattainable deadlines. The CAIR rule

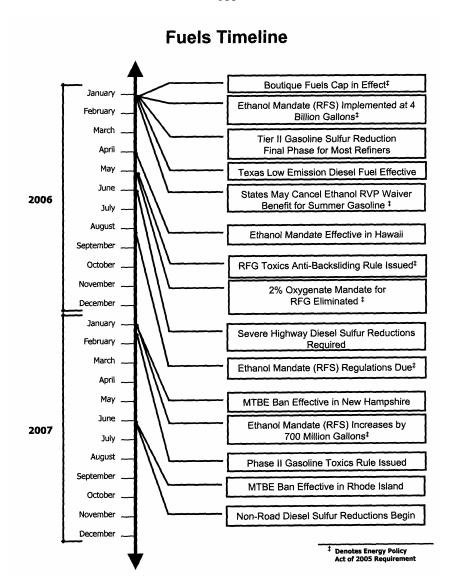
and ULSD diesel program will provide significant reductions to emissions within these areas when implemented. These reductions will not come soon enough to be considered unless the current unrealistic schedule is revised. If not, the result will be additional fuel and stationary source controls which will have an adverse impact on fuel supply and could adversely affect U.S. refining capacity. This issue needs immediate attention.

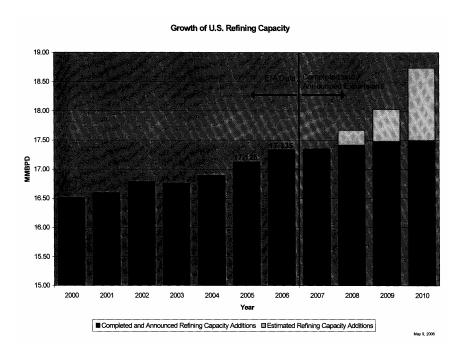
NPRA's members are dedicated to working cooperatively with government at all levels to ensure an adequate supply of transportation fuels at reasonable prices. But we feel obliged to remind policymakers that action must also be taken to improve energy policy in order to increase supply and strengthen the nation's refining infrastructure. We look forward to answering the Committee's questions.



#### Notes:

- Longer compliance time for refineries in Alaska and Rocky Mountain states as well as small refineries covered by the Small Business Regulatory Enforcement and Flexibility Act (SBREFA). Additional compliance time is available for these refineries if they produce ultra low sulfur highway diesel beginning in 2006.
- The Energy Policy Act of 2005 includes a renewable fuels standard (RFS) which mandates the use of 4 billion gallons of renewable fuels starting in 2006. The mandate increases to 7.5 billion gallons in 2012. EPA must promulgate regulations by August 2006.
- 3. Longer compliance time for small refiners covered by SBREFA.
- 4. Approximately twenty-five states currently have MTBE bans in place and others may pass similar bans in the future.
- The Energy Policy Act of 2005 allows state governors to petition EPA to eliminate the one pound RVP waiver for summer gasoline blended with ethanol.
- Phase II Mobile Source Air Toxics Rule to be proposed in February, 2006. Final rule expected in 2007.
- The Energy Policy Act of 2005 caps the number of motor fuels available for use in State Implementation Plans at the same level as those already in use as of September 1, 2004. EPA must publish a list of approved fuels by state and PADD by November, 2005.
- Under the Energy Policy Act of 2005 EPA must promulgate a rule to implement RFG anti-backsliding adjustments that will maintain emissions at 2001 and 2002 levels.
- 9. The first phase of the off-road diesel sulfur program is effective in 2007 and the second phase is effective in 2011.
- Ozone non-attainment designations made April 2004. State Implementation Plans (SIPs) are due by June 2007.
   Compliance, depending upon classification, required between 2007 and 2021. EPA promulgated a Phase 1 implementation rule in April 2004, but has not yet promulgated a Phase 2 rule.
- 11. New Source Review reform (RMRR) is subject to litigation. Refiners face uncertainty in meeting regulatory requirements. The NSR program was upheld in part by the courts however, part of the rule was remanded to EPA. Refiners support the reforms. EPA is continuing enforcement actions under the old rules.
- EPA set a new PM 2.5 NAAQS in 1997 and designated nonattainment areas in December 2004, but has not yet
  promulgated implementation standards. EPA is currently conducting a five-year review of the standard.
- EPA has entered into a consent decree with environmental organizations to review, and possibly revise, the New Source Performance Standards for petroleum refineries.
- 14. Proposed rule expected mid 2006.
- The Senate and the Administration support new authority for DHS to regulate chemical security which will impact refiners.
   Many facilities currently meet Coast Guard regulations under MTSA.





CHAIRMAN BARTON. And since I was the only one here, I was about ready to move several bills. But I am going to run and vote and come back, and Mr. Shimkus will continue the hearing. I apologize there are not more Members here, but many are watching on TV, and I am sure they will be here for the question period.

Mr. Becker, welcome to the committee and you are recognized for 7 minutes.

MR. BECKER. Good morning, Mr. Chairman, and members of the committee. I am Bill Becker, Executive Director of STAPPA and ALAPCO, the two national associations of State and local clean air agencies. We commend you for convening this hearing.

I am going to focus my testimony on State and local clean fuel programs, often referred to as boutique fuels. According to EPA, areas in 12 States currently use a total of 7 distinct fuels for boutique purposes. We do not dispute the serious nature of today's high fuel prices, or the potential supply disruptions that could occur as a result of a natural disaster or other extraordinary circumstance. However, we are very concerned that boutique fuels have been wrongly targeted as the cause, especially given last summer's changes under the Energy Policy Act. And we disagree with assertions that these programs are responsible for the significant fuel price increases and could potentially compound fuel supply disruptions.

We believe that any further curtailment of State and local authorities to pursue such programs could unnecessarily jeopardize public health and clean air. We therefore urge that Congress not further limit our ability to adopt boutique fuel programs.

Just to put this issue in context, air pollution poses a very serious public health problem. Notwithstanding decades of diligent efforts, at least 160 million people, more than half of our population, still live in areas of the Nation with unhealthful levels of ozone, fine particulate matter, or both.

So why do States and localities adopt boutique fuel programs? The simple answer is to achieve air pollution emissions reductions beyond those provided by conventional fuels. According to GAO, for example, State boutique fuel programs have reduced smog forming emissions by up to 25 percent over conventional gasoline.

EPA has acknowledged the importance of fuel programs to States, concluding, "Fuel controls can provide significant, cost-effective emission reductions of VOCs and NOx. Further, such fuel controls can often be implemented quickly and once implemented produce benefits immediately."

We believe States and localities have used their boutique fuels authority sparingly. In fact, most areas that have adopted boutique fuel programs did so at the urging of the fuel suppliers, because the industry preferred the less expensive boutique fuel programs over the uniform Federal Reformulated Gasoline program.

According to EPA, boutique fuels deliver substantial air quality and public health benefits at minimal cost, ranging from three-tenths of a penny to three cents per gallon. When compared to today's average national price for a typical gallon of regular gasoline, around \$2.90 per gallon, boutique fuels cost literally a fraction of 1 percent of the cost of gasoline.

What is clear is that gas prices are escalating for reasons unrelated to clean air protection. Moreover, gas prices have increased at the same rate nationwide, not just in areas with cleaner fuel. Even within the same neighborhood, the price of a gallon of gas can vary by an amount far greater than the cost attributed to boutique fuel.

To the extent there is concern over the potential for boutique fuels to exacerbate a future fuel supply disruption, Congress addressed this issue just last summer under EPAct by providing the EPA with statutory authority to temporarily waive fuel requirements during supply emergencies. This authority was used almost immediately thereafter following the devastation of Hurricanes Katrina and Rita.

Congress and the President have also taken other recent actions to further address any remaining concerns related to boutique fuels. Congress included in EPAct a provision rescinding their RFG oxygenate requirement that various States had expressed an interest in avoiding. In addition, EPAct included a provision eliminating the possibility of any future increase in the number of boutique fuel types. EPAct further called upon the EPA and DOE to undertake a study of the effects of State and local boutique fuels. And, finally, just last week, the EPA Administrator launched a Presidential Task Force comprised of the Nation's Governors to review boutique fuels across the country and make recommendations.

In summary, we believe the ability of States and localities to adopt boutique fuel programs is an essential regulatory tool for controlling air pollution. There is no evidence that boutique fuels contribute to high gasoline prices, and there are safeguards in place that allow EPA to respond swiftly and effectively should fuel supply disruption ever become an issue. In addition, several of the key reasons areas have pursued boutique fuels in the past have been otherwise addressed, and in no case can the number of types of boutique fuels expand.

Add to this the fact that EPA has yet to report to Congress on the results of its boutique fuel study under EPAct, and further, that the President's boutique fuel task force has just convened, in light of all of this, we urge the Congress not to further limit the ability of States and localities to adopt boutique fuel programs.

Thank you.

[The prepared statement of S. William Becker follows:]

PREPARED STATEMENT OF S. WILLIAM BECKER, EXECUTIVE DIRECTOR, STATE AND TERRITORIAL AIR POLLUTION PROGRAM ADMINISTRATORS/ASSOCIATION OF LOCAL AIR POLLUTION CONTROL OFFICIALS

Good morning, Mr. Chairman and members of the Committee. I am Bill Becker, Executive Director of STAPPA – the State and Territorial Air Pollution Program Administrators – and ALAPCO – the Association of Local Air Pollution Control Officials – the two national associations of clean air agencies in 54 states and territories and over 165 major metropolitan areas across the United States. The members of STAPPA and ALAPCO have primary responsibility under the Clean Air Act for implementing our nation's air pollution control laws and regulations and, even more importantly, for achieving and sustaining clean, healthful air throughout the country.

Our associations commend you for convening this hearing to explore fuel supply problems and escalating fuel prices. These are certainly very important and timely issues and we understand the desire of this Committee, and that of your colleagues, to take swift action to address them. We are pleased to have this opportunity to provide our perspectives, particularly regarding state and local clean fuel programs, often referred to as "boutique fuels." To be clear, a boutique fuel is one developed and included by a state or local area in an EPA-approved State Implementation Plan to reduce motor vehicle emissions and improve air quality. Authority for these programs is provided under Section 211(c)(4) of the Clean Air Act. According to EPA, areas in 12 states currently use a total of seven distinct types of boutique fuels.

We are especially concerned by assertions that there has been a "proliferation" of boutique fuel programs and that these programs are responsible for fuel price increases and could potentially compound fuel supply disruptions should they occur. Although we do not dispute the serious nature of today's high fuel prices and potential supply disruptions, we believe boutique fuels have been wrongly targeted as the cause, and that further curtailment of state and local authorities to pursue such programs could unnecessarily jeopardize public health and clean air. Accordingly, we strongly urge that Congress not further limit the ability of states and localities to adopt boutique fuel programs.

It is important to consider this in the appropriate context. Perhaps the most complex air quality problem our nation faces is achievement and maintenance of the health-based National Ambient Air Quality Standards. Notwithstanding decades of diligent effort, at least 160 million Americans – more than half our population – still live in areas with unhealthful levels of 8-hour ozone, fine particulate matter or both.

The health and environmental impacts associated with elevated levels of ozone are serious, including aggravation of asthma and chronic lung disease, permanent lung damage, reduced lung function, irritation of the respiratory system and cardiovascular symptoms. Although even healthy individuals can be at risk from exposure to elevated levels of ozone, children, seniors and those with compromised respiratory systems are especially vulnerable.

Pollution from airborne particulate matter also plagues our nation. In fact, fine particles pose the greatest health risk of any air pollutant, resulting in thousands of premature deaths each year. These fine particles are also responsible for a variety of other adverse health impacts, including aggravation of existing respiratory and cardiovascular disease, damage to lung tissue, impaired breathing and respiratory symptoms, irregular heart beat, heart attacks and lung cancer.

There is widespread agreement that cleaner fuels have been, and will continue to be, critical to reducing air pollution and protecting public health. The U.S. Environmental Protection Agency (EPA) has stated, "Fuel controls can provide significant, cost effective emission reductions of VOCs and NO<sub>x</sub>. Further, such fuel controls can often be implemented quickly and, once implemented, produce benefits immediately, typically reducing emissions from each vehicle in the fleet with no need for vehicle fleet turnover. This fleet-wide impact distinguishes fuels control from most other mobile source emission control options available to state and local areas." In a June 2005 report, the Government Accountability Office reported that state boutique fuel programs have reduced smog-forming emissions by up to 25 percent over conventional gasoline.

The Clean Air Act gives primary authority for regulating the environmental impacts of fuels to EPA, preempting states and localities from controlling or prohibiting any characteristic component of a motor vehicle fuel or fuel additive. However, recognizing that there may be extenuating circumstances warranting a state or local fuel program, in Section 211(c)(4) of the Clean Air Act, Congress provides two specific exceptions to the otherwise general preemption – if the EPA Administrator finds that a special state or local fuel standard is necessary to attain the NAAQS because 1) no other measures exist to bring about timely attainment or 2) other measures exist, but are unreasonable or impracticable. It is important to note that in either case, EPA approval is required.

Also noteworthy is the fact that over the years states have availed themselves of these limited exceptions very judiciously to address specific local air quality problems, resulting in just seven distinct types of boutique fuels nationwide. States pursue boutique fuels for various reasons. For instance, some are not eligible to opt into the federal reformulated gasoline (RFG) program and, therefore, adopt a boutique fuel in order to obtain cleaner-than-conventional gasoline in a particular area. Others, who are eligible to voluntarily opt into federal RFG, have elected to pursue a low-volatility boutique fuel instead, as a less expensive alternative to RFG. It is especially significant that in a

number of instances, a state or local area seeking to reduce smog-forming emissions pursued a boutique fuel over opting into the federal RFG program at the urging of the fuel suppliers. Although federal RFG would have reduced not only ozone precursors, but toxic air pollutants as well, fuel suppliers argued instead for a low-volatility boutique fuel (i.e., one with a low Reid Vapor Pressure, or RVP) with more limited air quality benefits and a lower price tag. Thus, fuel suppliers were "willing partners" in advancing boutique fuel programs over the uniform federal RFG program.

According to EPA, "boutique fuels deliver substantial air quality and public health benefits at minimal costs – ranging from 0.3 to 3 cents per gallon." When compared to today's average national price for a typical gallon of regular gasoline – \$2.90 per gallon – boutique fuels cost literally a fraction of 1 percent of the cost of gasoline. So what does account for a typical gallon of gasoline? According to the U.S. Department of Energy's (DOE's) Energy Information Administration, over half (55 percent) is for domestic and foreign crude oil. About 22 percent is for refining (processing the crude to make gasoline, diesel fuel and other products for sale to refiners). Almost 20 percent goes for taxes or fees that are paid to the federal, state or local governments, while 4 percent is for distribution and marketing, including shipping by pipeline, storage at terminals and delivery by trucks to retail stations.

There is no question that gasoline prices are high and climbing. However, gas prices are escalating for reasons unrelated to clean air protections. Moreover, gas prices have increased at the same rate nationwide, not just in areas with cleaner fuel. In fact, even within the same neighborhood, the price of a gallon of gas can vary by an amount far greater than the cost attributed to a boutique fuel. For example, this week, for a gallon of regular gas, the price differential between two gas stations supplied by the same fuel company, located just blocks away from each other in Arlington, Virginia, was 20 cents.

To the extent there is concern over the potential for boutique fuels to exacerbate a future fuel supply disruption caused by a natural disaster or unexpected circumstance, such as a pipeline break or refinery shutdown, this concern should be allayed by EPA's statutory authority to grant waivers. Last summer, Congress added to this authority by including a provision in the Energy Policy Act of 2005 (EPAct) specifically authorizing the EPA Administrator to temporarily waive fuel requirements during supply emergencies. This authority was used almost immediately thereafter, following the devastation of Hurricanes Katrina and Rita.

Congress and the President have also taken other recent actions to further address any remaining concerns related to boutique fuels.

Congress included in EPAct a provision rescinding the RFG oxygenate requirement that various states had expressed interest in avoiding. Prior to EPAct, RFG was required to contain 2 percent oxygen by weight – a requirement that was often fulfilled by blending in the controversial fuel additive methyl tertiary butyl ether, or MTBE. The elimination of this requirement will likely obviate the need for states to develop special fuel blends to avoid MTBE.

Also included in EPAct is a provision restricting the number of boutique fuels to the total number of fuels approved by EPA as part of a State Implementation Plan as of September 1, 2004, thus eliminating the possibility of any future increase in fuel types.

EPAct further calls upon EPA and DOE to undertake a study of the effects of state and local boutique fuels on air quality, the number of fuel blends, fuel availability, fuel fungibility and fuel costs. The results of this study are to be reported to Congress later this year, together with any recommended regulatory and legislative changes.

Some boutique fuel programs require a lower fuel sulfur content. However, recent implementation of EPA's landmark national low-sulfur gasoline regulation, as well as implementation by the agency later this year of national low-sulfur diesel fuel, should allow for local low-sulfur boutique fuel requirements to be phased out.

And, finally, just last week, the EPA Administrator launched a Presidential Task Force, comprised of the nation's Governors, to review boutique fuels across the country. EPA has established an ambitious schedule to provide the President with a final report within six to eight weeks.

As states and localities work toward achieving the goal of clean, healthful air nationwide, it is critical that they preserve key regulatory tools for consideration and possible implementation in the future. The ability to adopt a boutique fuel program as part of a comprehensive clean air plan is one such tool. There is no evidence that boutique fuels contribute to high gasoline prices and there are safeguards in place that allow EPA to respond swiftly and effectively should fuel supply disruption ever become an issue. In addition, several of the key reasons areas have pursued boutique fuels in the past have been otherwise addressed and, in no case can the number of types of boutique fuels expand. Add to this the fact that EPA has yet to report to Congress on the results of its boutique fuels study under EPAct and, further, that the President has convened a special task force to study this issue and make recommendations. In light of all this, STAPPA and ALAPCO urge that Congress not further limit the ability of states and localities to adopt boutique fuel programs.

Thank you again, Mr. Chairman and members of the Committee. I appreciate this opportunity to present STAPPA and ALAPCO's views and would be pleased to answer your questions.

MR. SHIMKUS. [Presiding.] Thank you.

Now I would like to recognize Mr. Paul Reid, President of Reid Petroleum Corporation. Sir, your full statement is in the record and you have 7 minutes.

MR. REID. Good morning, Mr. Chairman, members of the committee. My name is Paul Reid, I serve as President of Reid Petroleum Corporation based in Lockport, New York, near Buffalo. I appear before the committee representing SIGMA and NACS.

We have one primary message to deliver today; that is, there are no short-term fixes to dramatically reduce gasoline prices or significantly increase gasoline supplies. Therefore, we urge Congress and this committee to focus attention on options that we think will benefit consumers in the long term. In addition, we feel it is important for this committee to understand that the overwhelming majority of retail motor fuel outlets are owned and/or operated by independent marketers like myself. Independent marketers do not refine gasoline or diesel fuel. Therefore, we have long supported policies that expand supplies and promote a competitive market.

Gasoline supplies are currently tight, but adequate to meet consumer demand, in our opinion. To significantly increase gasoline supplies, given steadily increasing demand, either domestic producers must refine more or the Nation must import more. In that regard, SIGMA and NACS believe that Federal regulatory reforms will be necessary to assure that additional domestic refining capacity comes on line as quickly as possible.

In the spring of 2006, the upward pressure on gasoline prices has been exacerbated by several factors. Chief among those are higher crude oil prices, but also EPA's Tier 2 gasoline specs became effective, the phase out of MTBE occurred, and the increased price of ethanol. In fact, the price of ethanol has more than doubled in the past year.

Historically, ethanol prices tracked gasoline prices rather closely. Currently, however, spot ethanol prices are approximately 50 cents per gallon over regular gasoline, currently contributing to rising gasoline prices.

I feel compelled to point out there is one factor that has not contributed to higher gasoline prices; that is increased retailer margins. Rising wholesale and retail gasoline prices generally do not translate into higher profit margins for gasoline retailers. In fact, the opposite is true. My company's recent experience provides a perfect example of what may be a counterintuitive fact.

In February 2006, our average wholesale price for 87 grade regular unleaded gasoline cost \$2.40 cents per gallon, including taxes, and our average retail price for this same grade was \$2.52 cents per gallon, providing our company a gross margin of 12 cents per gallon. Compare that gross margin to April 24, 2006, when our wholesale cost was \$2.97 per gallon, including taxes, and our retail price was \$3.03 per gallon, providing us a 6 cents per gallon gross profit.

As you can see, my company was doing better; we were better off when the price was lower in February at \$2.52 per gallon than we were in late April, when the price was \$3.03 per gallon.

The only near-term step SIGMA and NACS recommends that Congress undertake to exert downward pressure on retail gasoline prices is to temporarily suspend duty on imported ethanol. Such a tariff suspension will attract additional ethanol supplies to those markets where it is most needed, such as the East Coast, the Gulf Coast, and California. We believe such actions will put downward pressure on ethanol prices.

We want to thank this committee, particularly Chairman Barton and Mr. Blunt, for authoring the boutique fuels and fuel waiver amendment that ultimately became Section 1651 of EPAct. The enactment of your amendment has slowed the balkanization of the gasoline and diesel fuel markets and, hopefully, has started us on a path towards a better harmonization of fuel specifications.

SIGMA and NACS recommends this committee consider improvements to Section 1541 of EPAct. First, we urge Congress to adopt an amendment to the EPAct boutique fuels cap to gradually reduce the number of boutique fuels in use across the Nation.

Second, we encourage Congress to address the proliferation of State alternative boutique fuel mandates, such as ethanol and biodiesel mandates.

Third, we urge Congress to consider amending the fuel specification emergency supply waiver authority granted to EPA to include a hold harmless provision for States.

As a final comment, SIGMA and NACS are very concerned about recent legislative proposals to mandate the use of E-85. Some independent marketers already sell E-85, and I expect many more will do so in the future. We recommend that Congress rely on market-based mechanisms to encourage the use of E-85, rather than a command and control mandate that requires retailers to sell this fuel.

SIGMA and NACS appreciates the opportunity to present this testimony, and I am pleased to answer any questions you may have. Thank you.

MR. SHIMKUS. Thank you very much.

[The prepared statement of Paul D. Reid follows:]

PREPARED STATEMENT OF PAUL D. REID, PRESIDENT, REID PETROLEUM CORPORATION, ON BEHALF OF NATIONAL ASSOCIATION OF CONVENIENCE STORES AND SOCIETY OF INDEPENDENT GASOLINE MARKETERS OF AMERICA

Good morning, Mr. Chairman, Ranking Minority Member Dingell, and members of the Committee. Thank you for holding this important hearing. My name is Paul Reid. I am the President of Reid Petroleum Corporation in Lockport, New York. My company owns 65 motor fuel outlets in Upstate New York and Northwest Pennsylvania and supplies gasoline and diesel fuel to 85 additional retail outlets in that area under long-term supply contracts.

I appear before the Committee representing the Society of Independent Gasoline Marketers of America (SIGMA) and the National Association of Convenience Stores (NACS). I serve as Chairman of SIGMA's Legislative Committee and my company also is an active member of NACS. Together, SIGMA and NACS members sell approximately 80 percent of the gasoline and diesel fuel purchased by motorists in the United States each year.

SIGMA is an association of more than 240 independent motor fuel marketers operating in all 50 states. Last year, SIGMA members sold more than 58 billion gallons of motor fuel, representing more than 30 percent of all motor fuels sold in the United States in 2005. SIGMA members supply more than 35,000 retail outlets across the nation and employ more than 350,000 workers nationwide.

NACS is an international trade association composed of more than 2,200 retail member companies operating more than 100,000 stores. The convenience store industry as a whole sold 143.5 billion gallons of motor fuel in 2005 and employs 1.5 million workers across the nation.

In the United States, there are more than 160,000 retail outlets that sell motor fuel. Of these, less than 5 percent are owned and operated by a major integrated oil company. The overwhelming majority are independent marketers like me. As such, we do not refine gasoline or diesel fuel. Rather, we purchase fuels from producers and importers and sell these fuels to consumers. Because of our dependence on others in the supply chain, SIGMA and NACS members always seek policies that maximize both the overall

amount of gasoline and diesel fuel supplies and the number of competing suppliers of these fuels. Independent marketers survive as the most cost-competitive segment of the motor fuels marketing industry because of ample supplies and diverse sources of supply. Without either, we would cease to be a competitive force in the market.

Gasoline supplies across the United States are tight, prices have been high, and the Energy Information Administration named 2006 the "Year of the Fuel Spec." My testimony today will focus on each of these issues in turn and recommend policy solutions. It is very important to note, however, that there are no short-term fixes to any of these issues. The gasoline issues we collectively face are complex, have been building for at least two decades, and will not be resolved overnight. Therefore, we urge Congress and this Committee to focus your attention on options that will benefit consumers in the long-term.

#### **Gasoline Supply**

You have heard ample testimony from other witnesses at this hearing on the current state of gasoline supply. Gasoline supplies currently are tight, but adequate to meet consumer demand. There is not, in SIGMA's and NACS' opinion, a significant current shortfall in gasoline supplies. As a result, we have not supported recent calls for EPA to use the fuel specification waiver authority granted to the Agency under the Energy Policy Act of 2005 (EPAct). EPAct authorized such waivers to respond to "extreme and unusual fuel supply circumstances." Such circumstances existed after Hurricanes Katrina and Rita, but they do not exist today.

This year, overall gasoline supplies have been constrained by several factors. First, the final phase-in of EPA's Tier 2 gasoline sulfur standards took effect at the first of the year. It is more difficult for producers to make low sulfur gasoline and the gasoline yield from a barrel of oil is reduced when sulfur is removed. In addition, European refiners do not typically produce gasoline with the U.S. sulfur level, cutting off a possible source of supply relief. Second, in significant part because Congress did not enact MTBE liability protection as part of the Energy Policy Act last year, MTBE is being phased out as a gasoline additive this Spring. The removal of MTBE from the gasoline pool alone reduces overall supplies by approximately two percent. At the same time, many producers are replacing MTBE with ethanol to gain octane. In those areas of the country where reformulated gasoline (RFG) is required, the addition of ethanol to RFG requires a gasoline blendstock with lower volatility, further reducing a producer's gasoline yield from a barrel of crude.

Thus, at a time when the public and many in Congress are calling for policies to increase domestic refining capacity and gasoline production, in reality the nation's existing statutes and regulations are working against supply maximization.

SIGMA and NACS believe that the unfortunate reality is that little can be done in the short-term to increase gasoline supplies. The existing domestic refineries are running at or near full capacity. To significantly increase gasoline supplies, either domestic producers must make more or the nation must import more. Some of the major domestic refiners have, over the past six months, announced close to 2 million barrels per day of capacity expansion at existing refineries. SIGMA and NACS welcome these announcements, but believe that federal regulatory reforms -- such as streamlined refinery permitting and new source review reform, as advanced by Chairman Barton and Senator Inhofe -- will be necessary to assure that this additional capacity comes on line as quickly as possible. Otherwise, we will have no choice but to continue to look overseas for our gasoline to meet increasing demand.

### **Gasoline Prices**

Gasoline prices across the nation have approached or surpassed \$3.00 per gallon over the past several weeks. It is important to remember that increased gasoline prices in

the Spring of each year are not a new phenomenon. Since 2000, each Spring gasoline prices have risen an average of more than 30 cents per gallon because of the transition to more expensive "Summer" blends with enhanced ozone controls and in anticipation of the higher gasoline demand of the Summer driving season.

In the Spring of 2006, the upward pressure on gasoline prices has been exacerbated by several additional factors. First, crude oil prices have reached and stayed above \$70 per barrel for an extended period of time. This time last year, crude oil was trading for about \$50 per barrel. Currently, more than 50 percent of the price of a gallon of gasoline flows directly from the price of the crude used to make the gasoline. Second, as noted above, gasoline supplies have been tight because of new sulfur regulations and the phase-out of MTBE, coupled with its replacement by ethanol.

Third, the price of ethanol has more than doubled over the past year. This would be inexplicable but for the fact that Congress itself created this market last year with a mandate requiring its use in ever-increasing quantities, tax credits to encourage its use, and import tariffs to protect domestic producers. Historically, ethanol prices tracked gasoline prices fairly closely. Currently, however, spot ethanol prices are approximately 50 cents per gallon *over* regular gasoline. While ethanol typically comprises 10 percent or less of a gallon of gasoline (more for E85 blends), rising ethanol prices clearly have contributed to rising gasoline prices.

Finally, there is one factor that SIGMA and NACS assert has not been a predominate factor in increasing gasoline prices -- increased retailer margins. As former NACS Chairman Bill Douglass testified before this Committee during your post-Katrina hearings last year, increasing wholesale and retail gasoline prices do not translate into higher margins for gasoline retailers. In fact, the opposite is true. As wholesale gasoline prices rise, as they have for most of the past two months, retailer margins are reduced. In some cases, wholesale prices rise so rapidly that retailers actually have a negative margin on every gallon of gasoline they sell.

My company's experience over the past two months has been consistent with Mr. Douglass' testimony last year. On February 1, 2006, my average wholesale 87 octane regular gasoline cost was \$2.40, including taxes, and my average retail price for this same grade was \$2.52. As a result, my gross margin -- from which I must pay my employees, my rent, my utilities, my credit card fees, and all other operating costs -- was 12 cents per gallon. Compare that gross margin to April 24, 2006, when my wholesale cost was \$2.97 per gallon, including taxes, and my retail price was \$3.03 per gallon, giving me a 6 cents per gallon gross profit. Once my expenses are deducted, my company was actually making more money on gasoline sales in February at \$2.52 per gallon than we were in late April at \$3.03 per gallon. I strongly suspect that my experience over the past two months is reflective of the experiences of nearly every gasoline retailer across the nation.

Again, there are no immediate public policy measures that this Committee and this Congress can take to reduce retail gasoline prices. The only near-term step SIGMA and NACS recommend that Congress undertake to exert downward pressure on retail gasoline prices would be to suspend temporarily the duty on imported ethanol. Ethanol prices have doubled over the past year. The market clearly is signaling high demand and a shortage in supply. Such a tariff suspension will attract additional ethanol supplies to those markets where it is most needed -- the East Coast, the Gulf Coast, and California. Such developments will put downward pressure on ethanol prices.

# **Gasoline Specifications**

SIGMA and NACS want to thank this Committee, particularly Chairman Barton and Mr. Blunt, for authoring the boutique fuels and fuel waiver amendment that ultimately became Section 1541 of EPAct. For several years, we have appeared before this Committee and others in Congress warning of the negative supply, fungibility, and price impacts of boutique fuels. The enactment of your amendment has slowed the

balkanization of the gasoline and diesel fuel markets and, hopefully, has started us on a path toward more harmonized fuel specifications. In addition, we congratulate you for your foresight in pushing for statutory authority for EPA to waive temporarily certain fuel specifications during unforeseeable supply emergencies -- authority that EPA exercised judiciously in response to Hurricanes Katrina and Rita.

As noted, the Energy Information Administration dubbed 2006 "The Year of the Fuel Specification." In addition to the Federal gasoline sulfur program and the phase out of MTBE I mentioned earlier, there are several different new fuel programs that will hit the industry, and consumers, in 2006. First, EPAct's renewable fuel standard takes effect this year and mandates that at least 4 billion gallons of ethanol and biodiesel be used by the nation's refiners and importers. Second, EPA's ultra low sulfur diesel fuel program will begin in June of this year. Finally, EPA has proposed a new mobile source air toxics regulation to reduce the benzene content of gasoline. Together, all of these programs have combined to produce a year in which fuel specifications will change dramatically -posing challenges for refiners, the motor fuel distribution system, retailers, and consumers. These environmental controls do impose costs on industry -- costs that industry will inevitably seek to add to our selling price if competition permits us to do so.

The EPAct boutique fuel restrictions were a common-sense approach to the proliferation of boutique fuels. These provisions preserve environmental protections by providing states with ample authority to adopt cleaner fuels if a state's air quality concerns warrant these fuels. But EPAct also seeks to impose order on this process by directing states towards existing fuels already in use in their region to restore fungibility, avert supply shortages, and reduce wholesale and retail price spikes. Federal coordination of, and guidance to the states on, gasoline and diesel fuel specifications was long overdue.

SIGMA and NACS do recommend that this Committee consider improvements to Section 1541 of EPAct. First, we urge Congress to adopt an amendment to the EPAct boutique fuels cap to gradually reduce the number of boutique fuels in use across the nation. The current cap does not reduce the number of boutique fuels -- it merely freezes their number at 2004 levels. The adoption of a mechanism to gradually lower this cap over time would complete the work started by Congress in EPAct.

Second, we encourage Congress to address the proliferation of state alternative boutique fuel mandates, such as ethanol and biodiesel mandates. These alternative fuel mandates are not covered by EPAct's boutique fuels cap, but they should be. The same policy goals that led Congress to adopt the EPAct boutique fuels cap -- increased supply, increased fungibility, and decreased price volatility -- are being undermined by a new set of state fuel mandates. The ethanol and biodiesel industries have been granted by Congress a guaranteed demand for their product through EPAct's Renewable Fuels Standard (RFS). SIGMA and NACS urge Congress to expand the EPAct boutique fuel cap to cover these new state mandates.

Third, we urge Congress to consider amending the fuel specification emergency supply waiver authority granted to EPA to include a "hold harmless" provision for states. After Katrina, we learned from several marketers that states were hesitant to waive state fuel specifications out of concern that at some point in the future EPA might force the states to offset the modest emissions increases that might occur during the short emergency waiver periods with further emissions controls on other sources. While the states' concerns may seem unnecessary -- why would EPA grant flexibility in response to a natural disaster with one hand while taking it away with the other? -- such situations are not uncommon. Such a "hold harmless" provision would prevent state hesitation in following EPA's emergency supply waivers and hasten the recovery of adequate fuel supplies after events like Katrina and Rita.

Finally, SIGMA and NACS are concerned about proposals on both sides of Capitol Hill to mandate a quick reduction in the number of fuels in use across the nation. Such

so-called "fuel slate" proposals are, in our opinion, premature. EPAct directed DOE and EPA to study whether such a reduction in the number of fuels can be accomplished without reducing gasoline and diesel fuel supplies significantly. A report on this study is due to be delivered to Congress by mid-August 2006. SIGMA and NACS believe that enacting a fuel slate before the conclusions of this report are received is unwise and, perhaps, unnecessary. Everyone's aim is to increase supplies and reduce price volatility. If EPA and DOE conclude that a fuel slate will have the opposite effect in their study, then it clearly is not a step that many in Congress will want to take. As a result, we suggest that Congress consider carefully whether the adoption of a fuel slate is appropriate at the current time. Once the study's recommendations have been received, if the increased supply, environmental benefits, and product fungibility merits of a fuel slate are evident, then Congress can act at a future date.

## **Alternative Fuels**

In recent months, both the President and Congress have increased their focus on the alternative fuels market as a way to reduce our dependence on petroleum products. Currently, discussions have centered on the product E85, comprised of 85 percent ethanol and 15 percent gasoline. Members of SIGMA and NACS follow closely the development of new fuels because we operate a major portion of the refueling infrastructure for the American motorist. However, we are very concerned about proposals that would establish an alternative fuels mandate and caution Congress against such action.

In general, it would be premature for Congress to consider yet another alternative fuels mandate when the regulations to implement the renewable fuels standard of EPAct have not yet been written. We urge Congress to give the industry and the market the necessary time to adjust to new regulatory requirements and to take time to assess the market effects of such requirements before moving forward with additional mandates. Taking action without fully understanding the potential market effects of those actions would be irresponsible.

With regard to E85 specifically, there are many facts that must be understood about the market viability of this product. First, E85 is truly an alternative fuel that can only be used in specially designed, flexible-fuel vehicles and less than five percent of the current motor vehicle fleet is comprised of these vehicles. While this percentage may rise in the future based on long-term plans of motor vehicle manufacturers and motorists' behavior, there is no guarantee that consumer demand for these vehicles will remain constant or increase in the future. If demand does increase, the number of retailers offering E85 will likewise increase, consistent with market demand and without a government mandate.

Second, the costs of infrastructure development for widespread marketing of E85 will be significant. Because of E85's corrosive properties, retailers selling E85 must dedicate a separate underground storage tank (UST) and dispenser system to the product. The most cost-effective option is to install a new UST and dispenser system, which can cost between \$50,000 and \$200,000 per location, depending upon the market in question. Since the majority (approximately 70 percent) of motor fuels retailers are small businesses with 10 or fewer stores, such costs cannot be easily absorbed. Furthermore, many facilities do not have the physical space/real estate to install an additional UST system. Since many facilities have only two gasoline USTs, one for regular unleaded and one for premium (mid-grade is provided by blending the two), a retailer would have to replace an existing UST system to accommodate E85, thereby greatly reducing the availability of gasoline. Such conversions will make economic sense to retailers once demand reaches a critical level, but forced conversions will serve only to penalize retailers who netted only 1-2 cents per gallon in pretax net profit in 2005.

Third, while the domestic ethanol industry is increasing its production to satisfy both the renewable fuels standard (RFS) established in the EPAct and to replace the fuel additive MTBE, it is uncertain if this increase will be sufficient to meet current or future

demand. In fact, the industry is already diverting supplies traditionally used in conventional gasoline markets to satisfy the demand in reformulated gasoline markets, an indication that supplies are not sufficiently plentiful to completely satisfy national demand. These distribution efforts are further complicated by the state renewable fuel mandates mentioned above, which lock supplies within geographic borders. In addition, EPA has not yet finalized rules to implement the RFS and the market effects of this program will not be known for years to come. Therefore, given the supply and distribution difficulties currently being experienced, as well as the uncertainty surrounding the newly enacted RFS, it would be irresponsible to enact yet another requirement for the use of ethanol, especially for a fuel that is not in strong demand, such as E85.

Fourth, according to the Renewable Fuels Association, E85 contains approximately 75 percent of the energy provided by regular unleaded gasoline. As a result, E85 offers motorists lower fuel economy and fewer "miles per dollar." For marketers to offer E85 at a price competitive with regular gasoline, E85 must be priced at a level that reflects this decreased energy content. Given that recent wholesale ethanol prices have matched or exceeded those for gasoline, it has not been practical for E85 retailers in most markets to price their E85 below regular unleaded without losing substantial money on every gallon sold. Consequently, marketers of E85 have reported 70-80 percent reductions in sales volumes when E85 is priced equal to or above regular unleaded.

Consequently, rather than pushing E85 to market via federal mandate, SIGMA and NACS would encourage Congress to consider alternative policy directions that would increase the production of E85 fuel and flexible fuel vehicles, reduce infrastructure enhancement costs to accommodate the product, improve consumer awareness and acceptance of E85, and increase consumer demand. This would be a much more market-oriented and consumer-friendly approach towards an alternative fuels market.

SIGMA and NACS appreciate the opportunity to present this testimony. I am pleased to answer any questions you may have.

MR. SHIMKUS. I would now like to recognize Mr. Shea, President and CEO of Buckeye Partners. Sir, your full statement is in the record and you have 7 minutes.

MR. SHEA. Good morning, Mr. Chairman. My name is Bill Shea, I am President and CEO of Buckeye Partners, LP, one of the largest independent refined petroleum product pipeline systems in the U.S. I am appearing today on behalf of the Association of Oil Pipelines and the Oil Pipeline Members of API. I will summarize my testimony, and thank you for including my full statement in the committee's hearing record.

Over the coming months, a combination of trends will affect the functioning of oil pipelines in fulfilling their role in petroleum supply. First, long-term growth continues in the diversity of fuel types shippers seek to transport by pipeline. Growth in so-called boutique fuels.

Second, this summer, the transition to ultra-low sulfur diesel fuels begins.

Third, almost simultaneously, the Nation is entering a period of phaseout in the use of the oxygenate MTBE and the rapid growth in the use of ethanol as a gasoline fuel additive.

Finally, we shouldn't forget that experts predict a continuation of a trend in stronger and more frequent hurricanes, which could knock out the electric power on which key oil pipelines depend for operation.

These elements in combination present a challenge to the petroleum supply system that the committee should monitor closely.

Before discussing these trends, let me briefly describe the role of oil pipelines in the supply of petroleum fuels. Oil pipelines provide about two-thirds of the petroleum transportation in the U.S. Pipelines are the primary method of bulk transportation of petroleum over medium to long distances.

Pipeline transportation has the dual advantages of efficiency and safety. About 17 percent of the annual ton-miles of our Nation's freight are carried by petroleum pipelines at a cost of about 2 percent of the total U.S. freight bill. Deaths and injuries from petroleum pipeline transportation are rare, and the environmental impact of pipeline transportation is less than any of its alternatives.

The Federal government regulates the rates charged by interstate oil pipelines. In fact, oil pipelines are the only part of the petroleum supply system that is under Federal rates regulation. The Federal Energy Regulatory Commission administers the Interstate Commerce Act to ensure that interstate oil pipelines function as common carriers and charge no more than the rates filed with FERC, which are typically limited to a few cents per gallon.

Oil pipelines provide transportation services to their customers. These customers determine what to ship, where to ship and when to ship. The decision on how much to ship of each commodity and which destination is made by our shipper customers, not by the pipeline operator.

Now, I would like to discuss the trends the committee should monitor over the coming months that could affect the role of oil pipelines in petroleum supply.

First is boutique fuels. The proliferation of the types and grades of petroleum products pipelines must carry continues. Capacity of long haul pipelines as well as many regional pipelines actually declines as the number of products handled increases. These unique products need more system space in both the pipeline and in tanks, so a combination of increased total volume moved and the operational effects of grade proliferation have used up what was excess capacity for product in the early 1990s.

Federal policies and State and local bans on the use of MTBE have led shippers to phase out MTBE as a fuel additive. As a result, the transition is underway to ethanol as a gasoline additive to meet local air quality specifications. Ethanol is not easily transported via pipelines, and as a result, nonpipeline transportation modes are being called upon to supply significantly larger amounts of ethanol than previously required. Solutions that will address or could address what pipelines carry ethanol are under active study by the industry and others, but at the present time, modes of transportation other than pipelines will carry this still relatively small but growing volume of ethanol in the U.S. fuel mix.

Another transition that will take place this summer will bring 15 parts per million sulfur diesel fuel, ULSD, into the U.S. fuel distribution infrastructure under rules adopted by the Environmental Protection Agency. Pipeline operators will continue to carry ULSD in pipeline systems in batch mode with higher sulfur fuels, including heating oil and high sulfur diesel up to 5,000 ppm and jet fuel up to 3,000 ppm sulfur.

Experience shows that sulfur contamination of ULSD increases at successively distant points in the pipeline system and especially after transfers through tankage into other pipelines. Recognizing these problems, EPA has agreed to a transition period and an extension until October 15, 2006, the time by which fuels sold at the retail station must meet the 15 ppm requirement.

AOPL and API welcome the EPA's decision. Affected oil pipeline operators are now making the investments and preparing for the transition period that will begin in June. We will use this period to gain actual experience in transporting ULSD and use that experience to solve problems that may arise.

Experts tell us that we are in a period of significant risk of major hurricanes affecting the U.S. Gulf Coast, where refining centers and pipelines are vulnerable to storm damage and loss of electric power. In 2005, we all had plenty of experience with the disruption such hurricanes can cause.

Lessons of that experience are, first, restoration of the grid electric power is critical to the resumption of pipeline service and should receive the highest priority during these events. The Federal government should be doing everything in its power to assist the electric utility industry generally and utilities individually to harden facilities to overcome threats and recover rapidly when power is lost.

Secondly, the decision by the EPA to act quickly to waive temporarily area-specific fuel requirements under the Clean Air Act allowed the petroleum distribution system to make the most effective use of existing supplies.

Oil pipelines are another component of the U.S. energy infrastructure that will require expansion in coming years to meet the needs of consumers. A supportive public policy will be required to ensure that oil pipeline expansions are made when needed. Elements of such a policy should include coordinated Federal, State, and local permitting to allow

operators to comply with environmental regulations and requirements in a timely way.

The Federal Energy Regulatory Commission should continue the recent trend to market based and adequately indexed oil pipeline rate treatment and needs to act promptly on requests for rates that support specific expansion projects.

AOPL looks forward to working closely with this committee, the FERC, and the DOT to ensure that the oil pipeline industry is able to meet the challenges of the future.

Thank you, Mr. Chairman.

CHAIRMAN BARTON. [Presiding.] Thank you, Mr. Shea.

[The prepared statement of William H. Shea follows:]

PREPARED STATEMENT OF WILLIAM H. SHEA, PRESIDENT & CEO, BUCKEYE PARTNERS, LP, ON BEHALF OF ASSOCIATION OF OIL PIPELINES

The principal points in this testimony are as follows:

Over the coming months, a combination of trends will affect the functioning of oil pipelines in fulfilling their role in petroleum supply.

- First, a long-term growth continues in the diversity of fuel types shippers seek to transport by pipeline –so-called "boutique" fuels. Proliferation of boutique fuels tends to reduce available pipeline capacity.
- Second, this summer, the nation is entering a period of phase out in use of the
  oxygenate MTBE and rapid growth in the use of ethanol as a gasoline fuel
  additive. Properties of ethanol sharply limit the ability of the current pipeline
  system to carry ethanol fuel mixtures, so other modes of petroleum
  transportation must be relied on to deliver the growing volumes of ethanol that
  will be needed.
- Third, almost simultaneously, an historic transition to ultra low sulfur diesel (ULSD) fuels begins. EPA has agreed to a transition period and an extension until October 15, 2006, the time by which fuel sold at retail must meet the 15 ppm ULSD requirement. AOPL and API welcome EPA's decision. The transition is needed to allow operators to gain needed experience with ULSD in their systems. Operators are now making the investments and preparing for the transition period that will begin in June.
- And finally, we should not forget that experts predict a continuation of a trend in stronger and more frequent hurricanes, which can knock out the electric power on which key oil pipelines and oil refineries depend for operation. The federal government should be doing everything in its power to assist the electric utility industry generally and utilities individually to harden facilities to overcome threats and recover rapidly where power is lost despite all best efforts.

These elements in combination present a challenge to the petroleum supply system that the Committee should monitor closely.

Oil pipelines are another component of the U.S. energy infrastructure that will require expansion in coming years to meet the needs of consumers. Needed expansions would be facilitated by coordinated federal, state and local permitting to allow operators to comply with environmental requirements in a timely way. FERC continue market-

based and adequately-indexed oil pipeline rate treatment ands needs to act promptly on oil pipeline rate requests made to support specific expansion projects.

#### Introduction

My name is Bill Shea. I am President and CEO of Buckeye Partners, LP, one of the largest independent refined petroleum products pipeline systems in the United States in terms of volumes delivered, with approximately 5,350 miles of pipeline. Buckeye also owns and operates 44 refined petroleum products terminals with an aggregate storage capacity of approximately 17.2 million barrels in Illinois, Indiana, Massachusetts, Michigan, Missouri, New York, Ohio and Pennsylvania, and operates and maintains approximately 2,000 miles of pipeline under agreements with major oil and chemical companies.

I am appearing today on behalf of the Association of Oil Pipe Lines and the oil pipeline members of API. AOPL is a 501 (c) (6) non-profit trade association of interstate oil pipelines, which includes pipeline transporters of crude oil, refined petroleum products, liquefied gases and anhydrous ammonia. Our Association's 49 members transport about 85 percent of the crude oil and refined petroleum products delivered by pipelines. AOPL members include pipelines that transport crude oil from production and import points to refineries and pipelines that transport the refined products produced in those refineries to end users and distributors (retailers, wholesalers, airports, railroads, etc.). AOPL's membership is comprised of domestic U.S. oil pipeline companies and Canadian oil pipeline companies. API represents over 400 companies involved in all aspects of the oil and natural gas industry, including exploration, production, transportation, refining and marketing. Together, these two organizations represent the vast majority of the U.S. pipeline transporters of petroleum products.

My testimony will cover the role played by oil pipelines in petroleum supply, describe government oversight of that role and sketch the challenges faced by the industry in providing for our nation's petroleum transportation needs, with emphasis on the coming months.

## The Role of Oil Pipelines in the U.S.

Oil pipelines provide about 2/3 of the petroleum transportation in the U.S., measured in barrel miles. Unlike natural gas, which can only be transported by pipeline, alternatives to petroleum pipeline transportation exist and include tankers, barges, rail and trucks. However, each of these alternatives has significant limitations, and, as a result, pipelines are the primary method of bulk transportation of petroleum over medium to long distances. It is difficult to imagine how our transportation network, which is 95% powered by petroleum, could operate without oil pipelines.

Pipeline transportation has dual advantages of efficiency and safety. About 17% of the annual ton-miles of our nation's freight are carried by petroleum pipelines, at a cost of about 2% of the total U.S. freight bill. Pipelines share with tanker vessels the safest record in petroleum transportation, safer than barge, rail or truck. Deaths and injuries from petroleum pipeline transportation are rare. The environmental impact of pipeline transportation is less than any of its alternatives. Oil pipelines deliver petroleum safely to nearly every region of the U.S. for a few pennies per gallon. A typical rate to transport petroleum product from the Gulf Coast to the Southeast is about 2 cents per gallon, to the Northeast is about 3 cents per gallon and to Chicago is about 2.5 cents per gallon.

# Economic Regulation of Oil Pipelines

The federal government regulates the economics of interstate oil pipelines – in fact oil pipelines are the only part of the petroleum supply system that is under federal economic regulation.

The Federal Energy Regulatory Commission administers the provisions of the Interstate Commerce Act to ensure that interstate oil pipelines:

- Function as common carrier providers of transportation to any qualified shipper;
- Charge no more than publicly available rates filed in advance with the FERC, which are typically limited to a few cents per gallon;
- Assign space on the pipeline based on monthly nominations from all interested shippers and prorate access to that space among all applicants in a posted, nondiscriminatory way when the line is full;
- Exercise no undue discrimination among shippers;
- Maintain confidentiality of shipper records and not share information of any shipper with any other shipper; and
- File annual reports on pipeline company income and cost data with the FERC that are available to the public.

Oil pipelines provide transportation services and charge fees that do not fluctuate with the price of the products that are transported. Because oil pipelines do not own the products that they transport, they do not benefit from any product price increases. In fact, refined products pipelines are generally adversely impacted by high commodity prices, as higher prices increase power costs and lower consumption levels. Even when an oil pipeline is an affiliate of a major integrated oil company, the Interstate Commerce Act and FERC oversight establish a wall between the pipeline portion of the firm and the owners' other operations.

## Oil Pipeline Rates

Typical oil pipeline rates range from 1 to 5 cents per gallon and are independent of the value of the oil being transported. Thus the revenue received by the oil pipeline is the same few cents per gallon, regardless of the sale price of that gallon, whether that sale price is \$1.00, \$2.00, \$3.00 or more.

Oil pipeline rates are posted in FERC-filed tariffs that normally take effect after 30 days and are subject to protest during that period. Oil pipeline rate changes are justified using one of four rate mechanisms: indexation, a settlement rate agreed to by all affected shippers, market-basis or cost-of-service. In calendar years 2003 and 2004, there were 1096 oil pipeline tariff rate filings. Of those, 937 (88%) were index-based, and 159 were justified on another basis. Of the 159 others, roughly 49% were market-based, 30% were settlement rates, 14% resulted from pervious settlements and 7% were cost of service based.

Most oil pipeline tariffs cover a specific group of products. For instance, a "Products Tariff' would apply the same tariff rate to gasoline, diesel, jet fuel and kerosene product shipments between the same points. For instance, Colonial's tariff defines "Petroleum Products" to mean "gasolines and petroleum oil distillates", which would include jet fuel, diesel fuel and heating oil. There are also crude oil tariffs, propane tariffs, etc.

Pipeline tariffs do not change frequently and, unlike commodity prices, are not adjusted as a result of short-term market circumstances. Because nearly 90% of tariffs are indexed, most adjustments are done on an annual basis and occur on July 1 of each year when the new FERC index takes effect. Even market based rate changes occur infrequently, with some changes actually reducing rate to meet competitive market conditions.

Pipelines also file rules and regulations tariffs that set forth the pipeline's conditions of service. These filings explain such things as the pipeline's tendering process, minimum batch size, allocation policy and product specifications. Such rules and regulations must be administered in a non-discriminatory manner. A system of checks

and balances on oil pipeline behavior operates through the ability of any shipper to protest any alleged deviation from FERC requirements.

Oil pipelines are providers of transportation services for generally fixed fees for our customers, who determine what to ship, where to ship or when to ship. The decision on how much to ship of each commodity and to which destination is made by our shipper customers. Pipelines then ship multiple products on a regular cycle of products. Normal practice is to provide transportation for all products to all destinations on a regular cycle.

# Oil Pipeline Revenues

The oil pipeline business is volume driven, and the incentive for pipelines from both a revenue and customer relations standpoint is to transport as much product as possible. Any inference that oil pipeline operators are purposely contributing to product shortages by reducing or shutting down capacity to cause higher product prices is simply false. In fact, the oil pipeline industry's drive to transport more volumes contributes to market liquidity, which on the margin should contribute to more competition and lower prices. The extraordinary efforts of our member companies to return their systems to service as fast as possible in 2005 in the aftermath of hurricanes Katrina and Rita provide ample evidence of the pipeline industry's motivation and commitment to business continuity and recognition of the critically important role played by pipelines in enabling adequate supplies of petroleum products to reach destination markets.

The oil pipeline industry is not a large generator of revenue by comparison with other sectors of U.S. industry, including other sectors of the energy industry. For 2004 (the most recent data available) the entire FERC-regulated oil pipeline industry received gross revenue of \$8.0 billion to deliver 13.4 billion barrels of crude oil and refined petroleum products for its various customers. A single company's revenue in many other sectors of the economy would far exceed the oil pipeline industry's revenue as a whole.

# Oil pipeline industry structure

Pipeline ownership is diverse, with several forms of ownership as detailed below:

- Major integrated oil companies (for example: ExxonMobil Pipeline Company, Marathon Pipe Line LLC, Chevron Pipeline Company, Shell Pipeline Company);
- Joint venture pipelines owned by shippers and other pipeline companies (for example: Colonial, Explorer, Trans-Alaska Pipeline, Capline); and
- Independents engaged primarily in oil pipeline transportation (Buckeye, TEPPCO, KinderMorgan, Enbridge, Plains All American).

A substantial percentage of the pipelines are independently owned and operated, with the current trend towards increased independent ownership of oil pipeline assets. Major integrated oil company ownership of oil pipelines has been steadily decreasing in recent years, with major oil companies now representing a minority of oil pipeline asset ownership.

## Current pipeline-related issues in petroleum supply

Over the coming months, a combination of trends will affect the functioning of oil pipelines in fulfilling their role in petroleum supply.

- First, a long-term growth continues in the diversity of fuel types shippers seek to transport by pipeline growth in so-called boutique fuels.
- Second, the nation is entering a period of phase out in use of the oxygenate methyl tertiary butyl ether and rapid growth in the use of ethanol as a gasoline fuel additive.
- Third, this summer, an historic transition to ultra low sulfur diesel fuels begins

And finally, we should not forget that experts predict a continuation of a trend
in stronger and more frequent hurricanes, which can knock out the electric
power on which key oil pipelines and oil refineries depend for operation.

These elements in combination present a challenge to the petroleum supply system that the Committee should monitor closely. I'd like to briefly discuss each in turn.

## Boutique fuels

The proliferation of types and grades of refined petroleum products shippers ask pipelines to carry continues. This growth in so-called "boutique" fuels puts increasing pressure on pipeline operations and by itself has absorbed storage and transmission capacity. Pipeline companies ship petroleum products in batches, with each batch distinct. Before 1970, when most of the US pipeline system was designed, a pipeline operator typically moved of the order of 10 distinct products. The Clean Air Act of 1990, as implemented by EPA and various states, ultimately led to the numerous kinds of gasoline in demand today. Gasoline is only part of the story. Fuels oils must also be segregated based on sulfur content (an EPA requirement) and dyed for specific markets (tax collection and EPA requirements). Jet fuel also requires segregated batches to meet different military and domestic aviation specifications. Typical large refined products pipelines today have of the order of 50 products regularly moving on each system over a shipping cycle. However, those same pipelines also have as many as a total of 100 - 120product grades for which they may occasionally provide transportation services. Overall, the federal government requirements drive the majority of segregated batches, followed by customer specifications, and individual state or city requirements.

Capacity in long-haul pipelines, as well as many regional pipelines, declines as the number of products handled increases. The unique products need more system space in both the pipeline and in tanks, so a combination of increased total volume moved and the operational effects of boutique fuels proliferation have used up what was excess capacity for product in the early 1990s. For example, some tanks must be completely emptied of one seasonal product before the next seasonal product can be stored, or specialized products may only use a portion of a tank, taking that tank out of service while that segregated product is moving through or temporarily stored. These factors reduce overall capacity.

Capacity is also reduced from the mixing that occurs at the interface of adjacent product grade batches during any transportation. This volume can sometimes be mixed into one or both of the adjacent batches and still meet the product specifications. At other times this trans-mix must be removed from the pipeline system prior to delivery to the customer. Thus, less than 100% of some products reach their destination. If the product is unique and is transported in a large pipeline, this downgrade can be significant.

## Ethanol and MTBE

Federal policies and state and local bans on the use in gasoline of the oxygenate methyl tertiary butyl ether have led shippers to phase out MTBE as a fuel additive. As a result, a transition is underway to the use of ethanol as a gasoline additive to meet local air quality specifications. This transition produces complications for gasoline supply by pipeline. The U.S. industry has blended ethanol in gasoline for decades. However, a significant challenge to use of ethanol is that it is not easily transportable through existing pipeline systems. As a result, ethanol is commonly transported by means other than pipeline (truck, barge or rail) to terminals at the end of a pipeline and mixed with gasoline before final delivery for consumption. These non-pipeline transportation modes are being called upon to supply significantly larger amounts of ethanol than previously required. Ethanol is not easily transported via pipelines for several reasons. First, ethanol has a tremendous affinity to absorb water. Water accumulation in pipelines is a normal

occurrence. In most cases water enters the system through terminal and refinery tank roofs or can be dissolved in fuels during refinery processes. Transportation by pipeline may result in sufficient water absorption to render ethanol unusable as a transportation fuel. If a gasoline-ethanol mixture is shipped in a pipeline, the water may strip some of the ethanol out, resulting in sub-octane fuel. Once an ethanol blend phase-separates it is extremely difficult and usually impossible to re-blend. In many cases the ethanol-water bottoms must be disposed of in accordance with hazardous waste regulations.

Second, ethanol can dissolve and carry impurities that are present inside multiproduct pipeline systems, making it harmful to motor vehicle engines when blended in gasoline.

Finally, ethanol is corrosive and may adversely affect pipeline parts. There is some evidence that ethanol in high concentrations can lead to internal stress corrosion cracking of the pipeline walls, which is hard to detect and manage. This may be accelerated at weld joints or "hard spots" where the steel metallurgy has been altered.

Solutions that will address problems with pipelines carrying ethanol are under active study by the industry and others, but at the present time, modes of transportation other than pipelines will carry the still relatively small but growing volumes of ethanol in the US fuel mix.

#### Ultra low sulfur diesel

Another transition that will take place this summer will bring significant volumes of 15 parts per million (ppm) sulfur -- ultra low sulfur -- diesel fuel (ULSD) into the US fuel distribution infrastructure under rules adopted by the Environmental Protection Agency. Products pipeline operators will continue to carry ULSD in pipeline systems in batch mode with higher sulfur fuels, including heating oil and exempted high sulfur diesel up to 5000 ppm sulfur and jet fuel up to 3000 ppm sulfur. The potential for contamination of ULSD during pipeline transportation requires attention and has been the subject of much study and investment in the oil pipeline industry. Inability to deliver on-specification ULSD product could lead to significant supply issues in some markets when EPA requirements go into effect. Diesel fuel is the nation's primary commercial fuel for getting goods to market -- trucks, trains and coastal marine vessels all rely on diesel fuel to operate. The ability of specific pipelines to deliver ULSD is impacted by the sulfur level of tendered product, system configuration, and the difficulty, given the lack of operating experience, of preventing ULSD contamination. The experience we have shows that sulfur contamination of ULSD increases at successively distant points in the pipeline system, and especially after transfers through tankage and to other pipelines.

The oil pipeline industry is aligned with the rest of the petroleum industry in supporting the 15 ppm maximum sulfur standard for motor fuels that the President has recommended and the EPA has promulgated. We have no doubt that this standard is achievable. Petroleum products pipeline operators will ultimately be able to handle and deliver on-specification ULSD in routine operations.

However, currently operators lack sufficient experience moving ULSD to guarantee that ULSD can be delivered to all markets on specification in the time frames contemplated by the EPA. Limited experience by pipeline operators to date with ULSD shows that it will require significant effort and investment to prevent sulfur contamination of ULSD in pipeline systems that of necessity must transport other high sulfur products as well. Moreover, this experience is currently not extensive enough to allow the causes of such contamination to be sufficiently characterized to be able to effectively eliminate it in the short term.

The oil pipeline industry is confident that the problems we currently see with sulfur contamination can be solved, given real experience transporting ULSD in our systems and adequate time to implement the indicated changes to our systems. However, without

the benefit of the knowledge that comes from actual experience with ULSD, we can not know what actions are needed to solve these problems.

Accordingly, AOPL asked EPA to allow flexibility in the supply and distribution system early in the program. Early flexibility will enable product to be supplied while the system resolves technical and operational difficulties that are likely to arise. For instance, at a minimum, storage tanks and other system assets must be flushed. Beyond that, the new fuel regulations will require new operating protocols throughout the system that cannot be perfected in advance of real world experience with 15 ppm diesel. Flexibility is reasonable when the nation is implementing an unprecedented and substantial change in its fuels regulations. It is essential when the nation's fuel supply is at issue.

In response, EPA agreed, to establish a transition period and during the transition period, to raise to 22 ppm the specification for compliant ULSD at retail. EPA also extended for 6 weeks, until October 15, 2006, the time by which fuel sold at retail must meet the 15 ppm requirement to within the agreed testing tolerance. AOPL welcomes EPA's decision to implement a six-week extension to the time period for the distribution system to transition to 15 ppm fuel.

Affected oil pipeline operators are now making the investments and preparing for the transition period that will begin in June. We are preparing to react quickly to experience during the transition period with transportation of actual volumes of ULSD.

#### More Hurricanes like Katrina and Rita

Finally, experts tell us that we are in a period of significant risk of major hurricanes affecting the US Gulf Coast where refining centers and pipelines are vulnerable to storm damage and loss of electric power. In 2005 we all had plenty of experience with the disruptions such hurricanes can cause. In the aftermath of the disruptions caused by hurricanes Katrina and Rita, the following conclusions about petroleum supply that are relevant are fairly clear:

- Restoration of grid electric power is critical to the resumption of pipeline service and should receive the highest priority during these events. The federal government should be doing everything in its power to assist the electric utility industry generally and utilities individually to enhance the ability of utilities to overcome threats and recover rapidly where power is lost despite all best efforts
- EPA needs to act quickly and decisively to waive area specific fuel requirements under the Clean Air Act in the widest possible area during emergencies. This allows the petroleum distribution system to make the most effective use of existing supplies. Following EPA's decisions in 2005, several refined petroleum product pipelines serving the Midwest immediately began receiving nominations of alternative gasolines to move north and east. This was an important action that was taken in a timely manner.
- Hoarding and panic buying exacerbate petroleum fuel shortages. Officials need
  to be active early and continuously to discourage, to the extent possible, these
  reactions. In addition, dissemination of false information by the media can
  make hoarding and panic buying worse and generally has a negative impact on
  markets.

## Oil Pipeline Capacity

While the cost of transporting oil by pipeline has a minimal impact on consumer prices, access to adequate pipeline capacity can make a substantial difference in consumer prices. As the aftermath of hurricanes Katrina and Rita demonstrated, when adequate pipeline capacity is not available, shortages, price increases and price volatility for petroleum consumers is the result. Even before hurricanes Katrina and Rita, we saw

what happens when pipelines are not available, for example, in Arizona in 2003 and in the Midwest in 2002 when key pipelines were out of service.

The U.S. oil pipeline infrastructure is a large system created over many years. Volumes moving on those pipelines grow only in response to increases in oil demand, that is, a few percent a year. Volumes seeking a pipeline can sometimes also increase or decrease due to changes in supply patterns, such as refinery closures, new crude supplies and other significant changes. Additions to capacity often present large hurdles to individual companies in terms of capital requirements and perhaps more importantly, acquisition of right of way and required permitting. The current system, constructed principally in the 1950s and 1960s with excess capacity for that time, is quite close to full capacity at today's levels of domestic petroleum consumption, and pipelines have had to adjust to a just-in-time inventory mentality, boutique fuels and to seasonal fuel switches that put additional strain on the system.

Recently, demand for petroleum products has been increasing, and that trend is expected to continue. In recent years, capacity for some pipelines has become constrained, particularly during the summer driving and winter heating seasons. These constraints, which affect both gasoline and distillates, will become more protracted as consumer demand continues to grow. Although alternative transportation such as longdistance trucking is an option for shippers in certain markets, those alternatives are typically less attractive than reliable, efficient, cost-effective pipeline service. Apart from the benefits to shippers and refiners, expansion of pipelines would provide increased stability and reliability to the nation's overall energy supply. As demonstrated by the effects of Hurricanes Katrina and Rita, it has become increasingly clear that the nation's energy supplies are subject to disruptions that can pose serious upsets to the national economy and security. The availability of additional pipeline capacity would provide healthy redundancy to the system and thus an additional measure of protection from disruptions that could otherwise lead to product price spikes and spot outages similar to those witnessed during and after the hurricanes. Pipeline expansion will involve right-ofway acquisition, permitting and capital investment issues, all of which could be affected by federal actions.

Oil pipelines are another component of the U.S. energy infrastructure that will require expansion in coming years to meet the needs of consumers. A supportive public policy will be required to ensure that oil pipeline expansions are made when needed. Elements of such a policy should include coordinated federal, state and local permitting to allow operators to comply with environmental requirements in a timely way. The Federal Energy Regulatory Commission should continue the recent trend to market-based and adequately-indexed oil pipeline rate treatment. Finally, FERC needs to act promptly on oil pipeline rate requests made to support specific expansion projects.

# Summary

To summarize, the amount charged to transport oil by pipeline is limited by either regulation or market forces and is quite small in relation to the value of oil itself. The cost of transporting oil and petroleum products by pipeline has a minimal, if any, impact on consumer prices of petroleum products. In coming months, a number of factors affecting oil pipeline operations and related to fuel specifications deserve the attention of public policymakers. These include the continuing growth in boutique fuels and the transition to ethanol and ultra low sulfur diesel, as well as the need to prepare for more hurricanes in the US Gulf Coast. The oil pipeline industry is focused on these issues and is preparing to address them appropriately.

We appreciate the opportunity to share our plans and views on these important issues with you. I will be glad to try to answer any of your questions, and AOPL and API would be pleased to work with the Committee on any follow up from this hearing.

CHAIRMAN BARTON. We now want to hear from Mr. Conley, with the truckers.

MR. CONLEY. Good morning, Mr. Chairman, and members of the committee. My name is John Conley, and I am President of National Tank Truck Carriers. I want to begin by thanking you, Mr. Chairman, for holding this hearing and for your kind invitation to my association to attend.

National Tank Truck Carriers is a trade association comprised of approximately 200 trucking companies, the majority of which specialize in bulk transportation of hazardous products, such as gasoline, diesel fuel, and ethanol throughout continental North America. The interest of our membership in this matter is substantial. The National Tank Truck Carriers is affiliated with the American Trucking Associations.

The Nation's tank truck industry is a key link in the distribution chain that provides our economy and our citizens the petroleum products that allow us to maintain and improve our mobile quality of life. To borrow from a well-known saying, "If your car has gasoline, your farm tractor has diesel fuel, and your home is warmed by fuel oil, a tank truck brought it."

NTTC was asked to discuss what impact increased use of ethanol is having on my industry's availability to continue providing gasoline and other products to service stations. The short answer is that it has presented additional distribution challenges, but the tank truck industry does have the capacity and the management skills to meet those challenges.

The increased movement of ethanol has added to the logistical balancing act our fleets already have to do to meet the almost irrational petroleum smorgasbord of what products can be delivered to any political jurisdiction on any given day. These changes often take place during periods when seasonal peaks are in demand. A consistent national fuel policy for the country would make the distribution of these products less cumbersome and less costly.

The increased demand for the transportation of ethanol at a time when our trucks are operating at capacity has exasperated the situation. However, I am again stating with confidence that our drivers and fleets will meet the demand. As Mr. Shea observed, ethanol does not move by pipeline. Our trucks are picking up ethanol directly from suppliers or transloading the product from railcars or barges. We are able to load much faster from barges, contrary to those instances where we have found our drivers sometimes have to wait in long lines to transfer from railcars.

In trucking, time is money, and time waiting is money not well spent. I am sure we will be able to work with our rail partners to devise quicker

ethanol transfer procedures. Obviously, as rivers freeze and the inevitable rail dislocations occur, more demand will exist for tank truck transportation from ethanol producers to our blending facilities.

At this point, I would like to anticipate two questions and state that National Tank Truck Carriers would not support increasing hours of service or raising weight limits in existing trailers as short-term solutions to gasoline delivery disruptions. In our industry, everything takes a second seat to safety.

As tank truck carriers, we do not set the price of fuel or determine what fuels will be produced. However, we are impacted by the almost daily changes in these two key factors. It is not uncommon for our drivers to be sitting in line at one terminal only to be contacted by dispatch and told to travel to another location because price at the terminal has dropped. This shopping for gas is another unproductive use of tank truck industry manpower and equipment, but it is a fact of life. It is controlled by our customers.

As supplies of various blends ebb and flow from one site to another, our trucks also chase supply. We are finding that those trucks often have to go longer distances to load ethanol or other products because of supply and demand changes by producers and retailers.

While ultra low sulfur diesel is not a subject of this hearing, widespread introduction of that latest new fuel will further restrict driving equipment capacity, especially if ULSD shippers or retailers decide we will have to provide dedicated equipment.

I want to briefly describe how we transport ethanol gasoline and other petroleum products. Trailers for these products are built to specifications developed by the Department of Transportation. Our drivers must hold a commercial driver's license with a hazardous material endorsement and a cargo tank endorsement. To qualify for the HM endorsement, the drivers must undergo a background check, including fingerprinting. Rethinking the whole approach to HM endorsements would enable us to hire drivers and put them to work more quickly. I know that is an issue for another day, yet I feel it is worthy of your attention.

Tank trailers used to haul gasoline also can and are being used to transport ethanol. In the most productive situation, a carrier can haul ethanol into a petroleum trailer terminal and haul gasoline back from the terminal to a retailer. Hopefully, we will get to the point where we can see a more efficient utilization of our fleets in this way.

In other cases, carriers are diverting trailers and drivers from gasoline service to handle ethanol transportation. But, again, we are meeting that demand as well.

We even have some carriers who do not transport gasoline, but have become involved in ethanol. This potential additional capacity is one factor that makes me confident in saying we will meet the distribution challenges we face today.

Thank you for your attention and, for me, the personal honor of appearing before you. Thank you.

CHAIRMAN BARTON. Thank you, Mr. Conley. [The prepared statement of John Conley follows:]

PREPARED STATEMENT OF JOHN CONLEY, PRESIDENT, NATIONAL TANK TRUCK CARRIERS, INC.

Mr. Chairman and members of the Committee.

Good morning. My name is John Conley, and I am the president of the National Tank Truck Carriers (NTTC). I want to begin by thanking you, Mr. Chairman, for holding this hearing and for your kind invitation to my association to participate.

National Tank Truck Carriers is a trade association comprised of approximately 200 trucking companies, the majority of which specialize in bulk transportation of hazardous products, such as gasoline, diesel fuel, and ethanol throughout continental North America. The interest of our membership in this matter is substantial. In addition to the common carriers NTTC represents, petroleum products also are hauled by private truck fleets operated by the major oil companies and by petroleum marketers. NTTC is affiliated with the American Trucking Associations.

The Nation's tank truck industry is a key link in the distribution chain that provides our economy and our citizens the petroleum products that allow us to maintain and improve our mobile quality of life. To borrow from a well knowing saying, "If your car has gasoline, your farm tractor has diesel fuel, and your home is warmed by fuel oil, a tank truck brought it."

NTTC was asked to discuss what impact increased use of ethanol is having on my industry's ability to continue providing gasoline and other products to service stations. The short answer is that it has presented additional distribution challenges but that the tank truck industry does have the capacity and management skills to meet those challenges.

The increased movement of ethanol has added to the logistical balancing act our fleets already have to do to try to meet the almost irrational petroleum smorgasbord of what products can be delivered to what political jurisdiction on what day. These changes often take place during periods of seasonal peaks in demand. Our entire petroleum distribution system would be less cumbersome and less costly if this county had a realistic and consistent national fuel policy. The addition of increased demand for ethanol transportation at a time when our trucks are being used to capacity has exacerbated the situation. However, I again state with confidence that our drivers and fleets will meet the demand.

As this committee is aware, ethanol does not move by pipeline. Our trucks are picking ethanol up directly from suppliers or are transloading the product from railcars or barges. We are able to load quicker from barges and have found that our drivers do sometimes have to wait in long lines to transfer from railcars. In trucking, time is money and time waiting is money not well spent. I am sure we will be able to work with our rail partners to devise quicker ethanol transfer procedures. Obviously, as rivers freeze and the inevitable rail dislocations occur, more demand will exist for tank truck transportation from ethanol producer to blending facilities.

At this point I would like to anticipate two questions and state that National Tank Truck Carriers would not support increasing hours of service or raising weight limits in existing trailers as short-term solutions to gasoline delivery disruptions. In our industry, everything takes a second seat to safety.

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As supplies of various blends ebb and flow from one site to another, our trucks also chase supply. We are finding that those trucks often have to go longer distances to load ethanol or other products because of supply and demand changes by producers and retailers. While Ultra Low Sulfur Diesel (ULSD) is not a subject of this hearing, widespread introduction of that latest new fuel will further restrict driver and equipment capacity, especially if ULSD shippers or retailers decide that we will have to provide "dedicated" equipment.

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We even have some carriers who do not transport gasoline that have become involved in hauling ethanol. This potential additional capacity is one factor that makes me confident in saying we will meet the distribution challenges we face today.

Thank you for your attention and the personal honor of appearing before you. I would be pleased to answer any questions.

CHAIRMAN BARTON. The Chair is going to recognize himself for the first 5 minutes of questions.

Mr. Dinneen, it is obvious that you have got a success story on your hands in your industry, which is a good thing for America and a good thing for the many people that work in the ethanol industry. I am supportive of ethanol, but I am somewhat puzzled, and I share some of Mr. Slaughter's concerns.

Given that the United States is now the world's largest producer of ethanol, we have a mandate for, I think, 7.8 billion gallons over time, why do we still have to have the tariff protection on imports and the subsidy on domestic production?

MR. DINNEEN. Well, Mr. Chairman, I think we still have a long way to go before we can have the kind of domestic renewable energy that we want to have. We want to have continued investment in this industry. I

think the notion about the tariff, as I indicated, is sort of built upon a series of false premises. It is a solution in search of a problem. Because the tariff today is not a barrier to entry. You have ethanol coming into this country through various preferential trade agreements, NAFTA, the Andean Free Trade Agreement, and most assuredly the CBI. A lot of ethanol comes in duty free already. If the marketplace needed additional imports, it could come in duty free through the CBI today. You don't see a real ramp up in CBI demand.

Even in Brazil, however, we are importing directly from Brazil, and they have built a heck of a program down there through 35 years of tax credits, of production mandates, of requirements for use, infrastructure development, debt forgiveness, export enhancement, all of which makes sense because that country today is pretty much energy independent. They don't need our incentives as well.

All the tariff does is offset the benefit that refiners get when they blend ethanol to the source, in effect, asking Brazilians to pay the benefit of the tax incentive up front.

CHAIRMAN BARTON. Well, I am still puzzled. Now, I may not have the latest numbers, but I show that imports last year from the CBI in thousands of barrels was 1,882,000 barrels, and the allowed importation for the CBI this year is 6,507, which would be 6.5 million, and that there were no tariffs paid on those last year because they are under the ceiling, and that the only country that actually paid the tariff was Brazil, which we imported 688,000 barrels from Brazil, and they paid almost \$16 million.

It would seem to me when you look at the price for ethanol, and again, this is 3 months old, so it may have changed, but in March of this year, March the 5<sup>th</sup>, the spot price for ethanol on the New York market was a little over \$2.50 a gallon. That same day the price for gasoline on that same market was about \$1.90.

If gasoline prices are higher than ethanol prices, and only one nation was paying the tariff last year, and the ceiling from the Caribbean Basin Initiative is over 6 million barrels this year, why would it not be acceptable, if for nothing else, as a symbolic gesture, to reduce the tariff or suspend it for a year or 2 years? I just don't understand that.

MR. DINNEEN. A couple of points. First of all, the spot market pricing, I mean it has gone up because demand has been rising.

CHAIRMAN BARTON. What is the price for ethanol?

MR. DINNEEN. Today, the spot market price is \$2.90.

CHAIRMAN BARTON. And what is gasoline price?

MR. DINNEEN. \$2.38.

CHAIRMAN BARTON. So it is over the gasoline price?

MR. DINNEEN. But, Mr. Chairman, that is without the incentive. Remember, gasoline companies are going to get a 51 cent tax incentive when they blend that ethanol. So net the tax incentive, the price is comparable. It is \$2.39 versus \$2.38.

But the important point, Mr. Chairman, is the spot market price is almost irrelevant to how ethanol is sold in this country. Ninety percent of the ethanol that is sold across the country is sold under long-term contracts, which are generally--

CHAIRMAN BARTON. What are those prices?

MR. DINNEEN. About 40 or 50 cents below the spot market generally. Some are even lower than that. So even on the spot market today, ethanol is trading at parity to gasoline, net the incentive. And as 90 percent of the ethanol sold in this country is sold much below that, ethanol is absolutely saving consumers money and helping to reduce gasoline costs.

The point about the tariff, however, is if we are going to start subsidizing Brazilian ethanol, and that country has already subsidized it to a great extent, you are sending a tremendously negative signal to our marketplace as we are trying to develop. We have plants being built today even in Texas.

CHAIRMAN BARTON. I am very aware of that.

MR. DINNEEN. It is a great thing.

CHAIRMAN BARTON. I am for ethanol, I am just not sure with prices where they are at the pump, this seems to be a no-brainer that you reduce or suspend it. You have tariffs and subsidies and mandates when you have either an industry that is in an infant start-up stage, or it is struggling to stay in business. By your own testimony neither of those conditions apply to the ethanol industry.

Again, I hope ethanol is the second coming. I would love for ethanol to be the alternative fuel that if you mix it with gasoline or biodiesel, and Mr. Shimkus, when we get to him is going to be glowing in his support for ethanol, as he should be, but it just doesn't make sense to me in the current economic situation we face.

The price is higher than the price for gasoline, business is booming, life is good. I'm getting on the oil guys on the other side of you. Mr. Cavaney knows well. I'm firing off letters to the CEOs of the big oil companies, and once a week I am talking to somebody in Mr. Slaughter's shop about building more refineries. I can't just tell the ethanol guys, that is fine.

I mean it just is an amazing situation. I would think that reducing the tariff would be, if nothing else, an act of faith in America to show--

MR. DINNEEN. The act of faith in America would be making sure we continue to develop domestic ethanol production capacity.

CHAIRMAN BARTON. Which would you rather have?

MR. DINNEEN. The signal that is going to go to the financial community is we are going to subsidize Brazilian ethanol at the expense of domestic production. You are not going to get the construction of ethanol plants across this country that I think we need to do.

CHAIRMAN BARTON. With prices like they are and the mandate, well, I will make you a deal. Pick one of three: Suspend the tariff for 2 years, eliminate the mandate, or cut the domestic subsidy in half. Which of those would you pick?

MR. DINNEEN. Mr. Chairman, you are asking me to pick amongst my children, and I love them all. I want them all to grow and develop.

CHAIRMAN BARTON. Well, we have to do that every day on this committee.

My time has expired. Mr. Shimkus for 5 minutes.

MR. SHIMKUS. Thank you, Mr. Chairman.

CHAIRMAN BARTON. We will do more than one round if we don't have more Members show up.

MR. SHIMKUS. Obviously, we have a full panel, and you may have encouraged me to just focus on the ethanol debate, which I would not shy away from, but I also want to obviously ask questions in other areas.

But the basic premise of this whole debate on ethanol, as you recall, was how to decrease our reliance of foreign imported crude oil. It is a basic energy security debate. We moved from the clean air issues of the oxygen standard, which was the first market entry provision, and the public is in total agreement with us that we can't be reliant on imported crude oil. So this is a curious debate on Brazil because just like we do not want to be reliant on imported crude oil, we do not want to be reliant on imported ethanol. We don't want to be held hostage to other foreign interests for our energy needs.

So the ethanol industry has shown great growth, and we are excited, and the numbers are stupendous. And I want to applaud the independent retailers, who, in my State, have stepped up to the plate, and they are the ones who are providing retail locations. To those who sit in these hearings all the time, you know I sound like a broken record, but I drive the E-85 flexible fuel vehicle. On average, at the pump, it is 10 to 15 cents cheaper per gallon. Two years ago, I didn't have a single retail location in my district. A single one. And I represent 30 counties in the southern part of the State of Illinois. Now I have 30 retail locations.

By my act of driving around and doing my job in my Congressional district, I am displacing the need for imported crude oil refined into gasoline by my use of ethanol. And that is what the public is crying out for us to do in a lot of different ways, and this is one of them.

The ethanol industry is still a new industry. If you look, total demand in this country and the available ethanol to displace that is still less than 10 percent, and probably 1 percent. So to say that ethanol is a mature industry ready to compete against the petroleum industry is not a correct statement. It is still in the infant cycle.

The Brazilian ethanol industry was developed by the Brazilian government. They are the ones who pushed this to meet their demands. And the last thing we want to do is to subsidize the Brazilian ethanol industry.

So having said that, the basic premise is that we have had great success and we want to work together with all our industry partners to move to address these concerns, and we are willing to do that.

With the panel present, I would like to go to Bob for a second, and we will hear about the reduction in the number of refineries. We have tried to address that in the refinery bill. One, tell me how that bill could be helpful; and, two, just for the record, the great thing about southern Illinois is that we are an energy rich State. So as much as I love ethanol, I love marginal oil wells, because we have them in southern Illinois. We have coal. Illinois is a big nuke State. So I love especially Illinois crude oil.

The ConocoPhillips' refinery in Wood River, Illinois, used to be four separate small refineries that over the years, through consolidation, now is one major refinery; and that major one refinery now produces more refined product than those four small independent refineries.

Bob, can you talk about the refinery bill that we are going to bring back up on the floor and how that would be helpful?

MR. SLAUGHTER. Yes, Mr. Shimkus, I would be glad to do that.

The refining bill really emphasizes the importance of the domestic refining industry in an additional capacity for the domestic industry. In essence, it is safe to say that the United States values refining capacity and that that capacity should increase. It would offer opportunities for permanent streamlining, and it would offer opportunities for new sites to be recommended for refinery construction. We think it is a very positive step forward, and we are hopeful that the House will adopt it.

MR. SHIMKUS. Thank you, Mr. Chairman. I yield back. My time is up.

CHAIRMAN BARTON. I thank the gentleman.

I think Mr. Stearns is next.

MR. STEARNS. Thank you, Mr. Chairman.

Mr. Cavaney, in your testimony you described a few domestic refinery expansions; and I guess the question is, why are those overseas refineries economical and domestic refineries aren't? Because we always say that there has been nothing done in the United States. Why

are they so much more economical overseas than they are in the United States?

MR. CAVENEY. They are not necessarily. It is very hard to generalize in that regard.

What you sometimes find is there are, as happens in the United States, major shifts in the plate of products that are produced. For example, if you look into Europe right now, Europe is on a major program to shift its emphasis for fuel over to dieselization. In other words, significantly increasing the number of cars that use diesel, and therefore their refining capacity is moving in that direction. That leaves some refineries who produce gasoline choose not to produce diesel, and so they become opportunists in terms of looking for markets where they can go ahead and sell into.

We just imported this past month the largest amount of gasoline we have ever imported. A good portion of that incremental increase came from Europe because they were able to swing gasoline here --

MR. STEARNS. How many different firms were refining oil in 1990?

MR. CAVENEY. I couldn't be exactly precise, but I can get you that number. I can tell you in 1981, it was about 350. It is about half that now.

MR. STEARNS. So today half as many are doing it.

CHAIRMAN BARTON. That is refineries. That doesn't mean owners of refineries. I don't think you have 300 owners of refineries.

MR. CAVENEY. No, they were the properties themselves.

CHAIRMAN BARTON. We probably have 40 owners of refineries?

MR. CAVENEY. It is a few more than that.

MR. STEARNS. So from the year 1990 to today, half of them are gone; is that true?

MR. CAVENEY. I would have to check and find out.

MR. STEARNS. Just approximately speaking. Because they went out of business? Mergers? Just why did so many leave?

MR. CAVENEY. There were, let's say, 350 in 1981. That is when we left the period of time when we had price controls, and there were huge subsidies that went to what we call the kettle refineries. A large portion, 50 or so, of those refineries could no longer exist without the government subsidy. They just went down between 1981 and 1985.

MR. STEARNS. We are talking about from 1990 to 2000 --

MR. CAVENEY. Please bear with me.

Then what happened is, in 1995, the Clean Air Act started to kick in. A lot of refineries elected to not make the financial investment to stay in business and put in those new environmental controls, and they closed down for reasons that was known only by their shareholders or their investors. So that period of time then, from 1985 onward, took the other

portion, less 50 of the half, and they have gradually either been, as Bob Slaughter mentioned in his testimony, those other refineries have been acquired. Those that weren't sufficiently acquired couldn't find a market, and they have been closed by their owners.

MR. STEARNS. So, in one sentence, the reason why half the refineries are gone is because of government incentives?

MR. CAVENEY. No, no. Fifty of the, let's say--

MR. STEARNS. We are talking general here. I am just talking general. Give me one sentence why half the refineries are gone.

MR. CAVENEY. Because they were not economically able to sustain themselves going into the future and made those decisions.

MR. STEARNS. Okay. Mr. Slaughter, you state that refiners have made substantial investment in technological advance process units that have increased the yield of gasoline.

MR. SLAUGHTER. That is correct.

MR. STEARNS. Do you have any ballpark figures or percentages that represent this industry as a whole in how these amounts have increased in recent years in terms of investment? And talk a little bit about this technologically--because if Mr. Cavaney is saying these things essentially, since the year 1990 to 2006, half of them are gone, yet the refiners have substantial investment in technological advances, that should make them much more efficient. So if you could give me a little bit of--

MR. SLAUGHTER. Yes, sir. The refining industry today is very state of the art. There have been significant investments in the industry. The average refinery now is considerably larger than it was in 1990. By the way, it really was halved between 1980 and the current day. We currently have about 54 refineries in operation.

MR. STEARNS. Maybe you can answer the question, then: What do you think from 1990 to 2006 the number is?

MR. SLAUGHTER. Well, currently, we have 54 companies operating about 149 refineries. Many of those companies are small.

MR. STEARNS. And how many did we have in 1990?

MR. SLAUGHTER. Well, we would have had considerably more, sir. I know there was double the amount of refineries in 1980 than we have now

MR. STEARNS. Three hundred companies?

MR. SLAUGHTER. Yes. And refineries used to get mandatory allocations. A lot of them went to small, inefficient refineries. When we left the price control regime in 1980 under President Reagan, they were no longer economic; and they basically went out of existence in the period that we are talking about. The problem was they weren't

competitive anymore, sir; they didn't justify the tremendous investment that you have to put in to be in this business.

MR. STEARNS. Thank you, Mr. Chairman.

CHAIRMAN BARTON. The gentleman's time has expired.

It is Mr. Bass's turn if he wishes to, or you can go vote, and I will go to Mr. Boucher. Which do you wish to do?

MR. BASS. I will go vote.

CHAIRMAN BARTON. He looks calm and collected. You know he is not worried about making the vote. He is smiling and all comfortable here. So Mr. Boucher for 5 minutes.

MR. BOUCHER. Well, thank you very much, Mr. Chairman.

Mr. Slaughter, let me propound some questions to you, if I may.

MR. SLAUGHTER. Yes, sir.

MR. BOUCHER. Do you believe that we have a shortage of refining capacity in the United States today?

MR. SLAUGHTER. I think that we need additional refining capacity, yes. I don't think that we need to necessarily produce 100 percent of what we consume here domestically, but I think there is a need for additional capacity. That is why I think the industry is announcing 1.4 million in refinery expansions in barrels per day, and that will come on in the next 3 to 4 years.

MR. BOUCHER. Are any of those investments taking place on greenfield sites, or is that just a proposal for expanding existing refineries?

MR. SLAUGHTER. The only greenfield site that is looking to build a completely new refinery would be the Clean Fuels Project in Arizona, which is having some difficulty. They have been trying to put that together for most of the last decade. They have not been able to break ground yet.

The economics strongly favor adding capacity at an existent site. You have the economies of scale. For instance, Motiva has just announced a 325 barrel-a-day expansion at the Port Arthur, Texas, facility. That is larger than many refineries are. According to their press announcement, they will be able to bring that on line in 3 to 4 years. If you tried to do that through a new refinery, sir, it probably would take you at least 10 years, and you wouldn't even be certain that you could break ground then.

MR. BOUCHER. Many of the individuals who have commented about the need for new refineries not only point to the need for a capacity increase but also point to the need for some diversification of the places where refineries are located.

It has become a modern fact of life, unfortunately, that we are having more frequent and more severe hurricanes than we have had historically; and I think the concern is driven largely by that fact. If another hurricane of major consequence were to affect the Gulf Coast--as it may very well happen even this year--the refinery capacity that we have would be placed at risk, some large portion of it could be taken off line, just as it was during the case of Hurricane Katrina.

So if the expansions that are planned are largely at existing sites and the only greenfield site is the one you mentioned in Arizona, which is for clean fuels--and I gather that is not necessarily refining gasoline into--or refining crude oil into petroleum, although perhaps it is. You can clarify that. But let me just say, if most of the investment is taking place at existing sites, does that not give rise to concern that we are not engaging in an appropriate diversification of the location of these facilities so that they will not be subjected to disruption in the event of natural disaster?

MR. SLAUGHTER. To answer your question about Arizona, that would be a modern refinery. It would be about 150,000 barrels a day and would cost about \$2 billion. It would produce up-to-date gasoline, diesel, and other products, but it has been having trouble. They have got an air permit, but they are having trouble getting financing, actually getting that built.

Your question is a good one. Yes, they have the air permit. We believe that it would be very good to incentivize refinery construction. Congress did this in the EPAct bill. There is an expensing provision which allows people who are expanding existing refineries or building new ones to expense 50 percent of the cost. Now that is a very significant provision. I think it is reflected in the plans for additions that companies have mentioned. I suggested that might be looked at again, and you might be able to retool that in a way that would give incentives for new refineries, which probably will be in other locations. There is a large capacity in the Gulf.

But the problem has been the country needs more capacity, and there is a strong feeling that it is not only not economical, but functionally impossible to build those now in other parts of the country that could actually use them. The Northeast has no refineries. There are certainly other places.

But the fact of the matter is that the alternative, if you tried to move the part of the industry that is in the Gulf Coast now because of the hurricane damage, our fear is that you would end up moving most of it abroad, and you couldn't replicate it here.

MR. BOUCHER. Please don't misunderstand the question. I wasn't suggesting moving anything. I was simply suggesting that, as the investments in new refinery capacity occur, perhaps it might be the better part of wisdom to locate some of that new investment in areas other than the Gulf Coast, which is where the bulk of our refineries are at the

present time, so as to avoid the potential of a supply disruption from refineries to the market in the event that we have another major disaster.

Let me move to another subject, if I may. It has been widely reported that between September 2004, and September 2005, on average the increase in profits for the refining industry was about 255 percent, a truly startling number. Is that number accurate?

MR. SLAUGHTER. I find it hard to believe that it is that large an increase in that period of time--

MR. BOUCHER. Do you have another number?

MR. SLAUGHTER. I will get them for you, sir, but I believe that one is inflated.

You know the history--I know you do because we have talked about it before here--of low profitability in this industry.

MR. BOUCHER. Well, I know historically you have had some lean years; and that is not to be denied. However, if the increase of 255 percent in a 1 year period is accurate, I think it obviously urges the next question, which is, what happened that was so extraordinary within that year? And if the number wasn't 255 percent, obviously, some high number was the reality. So why such a major increase in that 1 year period?

I am trespassing on the committee's time, but let me give you an opportunity to answer that, if you would.

MR. SLAUGHTER. All right. We have been in a period of, of course, higher prices driven by a lot by higher crude prices and increased demand in the U.S. You know, we also had the hurricane situation last year, which the industry responded extremely well to. We are about to get back into commission and produce the products that people needed.

I do not believe the figure that you are using is correct, but, undoubtedly, profitability in the industry is up and certainly from what it has been historically, when the refining industry is known for actually being an area of negligible profitability that requires billions of dollars in investment every year.

I will get you the figures for that last year, but the fact that we have had 2 good years in the industry has encouraged people to think that maybe the years ahead will look a little more like the last few years and not like the 1990s, with no profitability, so they are adding capacity. They are putting a lot of that money back into the business, sir.

MR. BOUCHER. Mr. Slaughter, thank you very much.

MR. BOUCHER. Thank you, Mr. Chairman.

MR. SHIMKUS. [Presiding.] Thank you.

The Chair recognizes my colleague from Florida, Mr. Bilirakis, for 5 minutes.

MR. BILIRAKIS. Gentlemen, we heard yesterday a claim that OPEC sets its oil price based on the price signals from the United States gasoline market, so I ask--I have to limit this because I want to go on to another area--Mr. Cavaney and Mr. Slaughter, is there any truth to this claim? Can OPEC set the world price of oil all by itself?

MR. CAVENEY. Mr. Bilirakis, it is a little bit the opposite right now. One of the frustrations OPEC is experiencing at the present time is they have an inability to impact, under the current environment, the price of oil, so it is a little bit the reverse right now. I would have no reason to know whether or not it was true. It is just not something that we would be involved in.

MR. BILIRAKIS. Mr. Slaughter, what is your comment on that?

MR. SLAUGHTER. Mr. Bilirakis, I doubt that that is true. Essentially, the only significant additional capacity for crude production in the world is in Saudi Arabia. It is roughly only one billion barrels per day now, the lowest safety margin that the world has ever had, and that corresponds to a significant reduction in their ability or anyone's ability to drive this market.

The international crude price is set by the competitive circumstances of that market, and the ability at this point of anyone to control that is at its lowest point because of that very small margin of safety. That means almost all the oil that can be produced in the world is being produced and sold right now. That is a strong market.

MR. BILIRAKIS. Well, somebody makes these decisions. I know we talked about supply and demand and the market doing it and that sort of thing--

MR. SLAUGHTER. Well, if I could respond. If you look at what OPEC has said, OPEC for years has been trying to talk about the benefits of a \$30 or a \$40 environment. Recently, the Saudi Arabia Energy Minister was talking about a low \$50 environment, which indicates that they have concerns over the price levels that crude has reached right now.

MR. BILIRAKIS. Why has it gone all the way up to \$70 then? I mean, if they have concerns that \$50 may be a little high--and I read the same article--then why is it \$70 at this point?

MR. SLAUGHTER. There are a lot of guesses as to that, but nobody really knows why. I mean, there is a feeling that there is a risk premium in the crude price which reflects people's concern that something is going to happen to crude supplies because of problems in Iran or difficulties in Nigeria and other places potentially.

The analysts that I have talked to have a hard time explaining the current price level for crude. It seems to be driven by favor of adverse events, geopolitical events--

MR. BILIRAKIS. With all due respect, sir, that is what we keep reading and that is what we keep hearing. I think it is probably more rationale than anything else, so--

Well, just getting away from that for a moment, let's go to energy independence. To both of you, how strongly do you all feel that the United States should be independent from foreign oil? Mr. Caveney.

MR. SLAUGHTER. I will just say that I think that is an admirable goal. I think it will be very difficult to achieve. I came to town and started to work for a member of this committee in the early 1970s, and President Nixon had that as his goal at the time. It was impossible to achieve. It is going to be difficult now. But it should be our goal to be as independent as possible. We are always going to be relying on some imports of fuel, but we should try to be as independent as possible.

MR. BILIRAKIS. How would it affect your--Exxon, et cetera, if we had energy independence, Mr. Cavaney?

MR. CAVENEY. First of all, energy independence is a noble goal, as Bob said, to work towards. It would be virtually impossible to do here in the short term--

MR. BILIRAKIS. Short term.

MR. CAVENEY. In the short term because of the amount of imports we need.

The more appropriate response to increase our energy security in the near term, let's say in the next couple of decades and so forth, would be to focus on interdependence, which is to try and diversify the supplies in the international community where we get our sources of imported oil and also to increase our domestic production here at home. That gives us more options, and if some area has upsets where we can't take advantage of it, it gives us more opportunity to swing and keep a stable amount of imported oil coming into the system.

MR. BILIRAKIS. But, I guess my question is, if we ever were to reach it, and we talk about a goal and that sort of thing. We don't really try very hard to reach that goal, so I am not really sure of what the definitive goal is. But if we ever reached it, how would it affect your member companies, your producing companies?

MR. CAVENEY. It is virtually impossible to say because we don't currently have the kinds of energy sources particularly that would support the transportation sector that you can predict there. I believe that we have an open trade, free-trade system in the world and that system is always going to provide opportunities to bring in some products at reduced prices. So that could happen even with the goal of energy independence.

MR. BILIRAKIS. My time is up, sir, but that is really, with all due respect, I guess maybe I didn't ask the question correctly. I am just kind

of curious how that would affect the bottom line, the profit line, if you will, of these companies.

Thank you, Mr. Chairman.

MR. SHIMKUS. Thank you.

The Chair recognizes the gentleman from Michigan, Mr. Stupak, for 5 minutes.

MR. STUPAK. Thank you, Mr. Chairman.

Mr. Cavaney, you indicated that in the 30 investigations put on price gouging there has been no finding of price gouging on gas prices or energy prices, but the FTC has used terms like gaming the system and maximizing prices by the industry. But with no real Federal law on price gouging, it is impossible for them to find price gouging by the FTC, isn't it?

MR. CAVENEY. Well, the FTC Chairman currently has said that, even if Congress were to outlaw price gouging, the law would be very, very difficult to enforce fairly.

MR. STUPAK. But you have got to have a law first.

MR. CAVENEY. Well, we do have laws in the majority of the States right now, and a number of other States are putting in laws. The FTC has also spoken about the fact that these are very situational circumstances, and being closest to where the violation may have occurred is going to put someone in the best position to determine it. What you need to be careful of here is, if you look at a Federal law, you want to make sure that, if such comes to pass, that it doesn't de facto create a circumstance where you have price gaps and you are back into the whole situation of price controls. We have been there before, and we know that doesn't work.

MR. STUPAK. But your statement in your testimony that there hasn't been any price gouging, you can't find price gouging if there is not a Federal law; isn't that correct?

MR. CAVENEY. No, there are laws in--

MR. STUPAK. Well, explain how this price gouging works then.

MR. CAVENEY. Well, the problem is defining price gouging, and that is one of the difficulties why it is best left to the States to look at that. They can look at the circumstances where they are and make their best guess at the definition.

MR. STUPAK. Well, if gas went up 90 cents in one day in Michigan in one of our cities, is that price gouging?

MR. CAVENEY. You would have to know the circumstances of what that person paid for that.

MR. STUPAK. Can you give me a scenario where 90 cents in one day would be justified?

MR. CAVENEY. Well, the individual could have had to purchase gasoline and it was that much more expensive. You just can't look at the surface, and that is what makes these things so difficult.

MR. STUPAK. Let me ask you this question then. You said the world price of crude is the most important factor dealing with gasoline, right?

MR. CAVENEY. Yes, that is what the Federal Trade Commission said in June of--

MR. STUPAK. Do you agree with that statement?

MR. CAVENEY. Yes, I do.

MR. STUPAK. So if we reduce the price of crude by \$20 per barrel, would that be reflected then in the price of gasoline?

MR. CAVENEY. Yes, it would. If you look historically over decades, you will find there is a very close correlation between gasoline and--

MR. STUPAK. So if it is \$60, let's say, to make easy math here, and it was reduced by \$20, there should be one-third off at the gas pump.

MR. CAVENEY. Generally, you can say that, but each circumstance would be--

MR. STUPAK. So then would you support our legislation, the PUMP Act, which would actually take the speculation, fear, and greed out of the price of oil and make sll trades in oil subject to the Commodities Future Trade Commission? Would you support that?

MR. CAVENEY. I would have to look into it. I don't know enough, but I will get back to you.

MR. STUPAK. Well, the experts tell us that it would reduce the price of gas by \$20, because three-fourths of the oil futures are traded without any oversight by the Commodities Future Trade Commission. So if we are interested in reducing the price of gasoline, I would think that that would be one good way to start.

Let me ask you this one. We had testimony yesterday from our panels of witnesses about the crack spread. Are you familiar with the crack spread?

MR. CAVENEY. Yes.

MR. STUPAK. They told us yesterday that the crack spread should probably be about \$8. But, right now, it is \$20; and Chairman Barton thought it might be as high as \$30. If we reduce that crack spread, would that bring down the price of gas?

MR. CAVENEY. Well, the crack spread has a number of factors in it. It has all of the costs as well as whatever the margin of profit is at the end of the day.

MR. STUPAK. Sure.

MR. CAVENEY. And it is difficult to know each individual refinery, what their spread is at any given moment.

MR. STUPAK. So each refinery could have a different crack spread?

MR. CAVENEY. Yes, that is correct. But at the end of the day --

MR. STUPAK. But isn't \$20 too high? Would you agree it is too high?

MR. CAVENEY. You can't make that statement. You don't know what his or her cost is. That is what the difficulty is. You have to look at each individual--

MR. STUPAK. I mean, that is why we ought to have a Federal price gouging law that takes these factors into consideration, shouldn't we?

MR. CAVENEY. At the end of the day, you should find out what the profit is, the earnings that that person makes. The earnings historically from the industry have been pretty much in line with all industries, so that would indicate that the cost factors in that spread are reasonably high.

MR. STUPAK. Sure, reasonably high.

Okay, let me ask you this. I have internal memos here from Chevron, Texaco, and Mobil in which they actually quote the American Petroleum Institute; and basically they say we have to reduce the number of refineries in this country.

The Chevron memo states, if the U.S. petroleum industry doesn't reduce its refining capacity, it will never see any substantial increase in profits; the Texaco memo complains that supplies significantly exceed demand, leading to very poor refinery margins and very poor refinery financial results; and the Mobil memo advocates keeping a smaller refinery, Powerline, from reopening, stating that a full court press is warranted in this case.

Has API encouraged refineries in the past to shut down to increase the price of gasoline?

MR. CAVENEY. Absolutely not, that would be a restraint of trade.

MR. STUPAK. So if you are quoted in these memos--not you yourself but API--these memos would be incorrect then, is that your position?

MR. CAVENEY. I haven't seen any of those memos and can't comment on them.

MR. STUPAK. I will be happy to show them to you. Thank you.

MR. HALL. [Presiding.] The gentleman yields back.

Mr. Cavaney, I have the right and I have got the gavel, so I am going to ask a question of you that I have really wondered about. You have recommended and others recommended more areas for energy exploration; and, of course, we are all interested in that. We passed all kinds of bills. We had to leave ANWR out to get anything through the Senate, and we go through all these gymnastics to try to get more energy to lower the gasoline price and to keep us out of a war.

Leaving aside all the politics, if all oil limit tracks were opened to exploration today, what would be the most economically compelling tracks to develop? Kind of rank them for me, if you would.

I have heard John McKetta from Austin, Texas, say we have enough coal in the midsection of this country to almost double the output of the OPEC nations all combined if we could just mine it. But tell me about the energy and the drilling and the off-shore drilling and ultra-deep drilling in the shut-in areas. Just kind of rank them for me, if you can do so

MR. CAVENEY. We are going through a migration, as we have historically done in the oil and gas business, which is we are moving now to increasing more of what we call unconventional oil and gas into the system, rather than conventional. Conventional, if you will permit me to exaggerate a bit, is the easier to refine and easier to produce. The unconventional is things like deep gas clays, which require very extended and expensive technology in the Gulf, up in parts of Alaska, and the like.

So what we had about 2 years ago was 10 percent of our production here was of that unconventional amount. EIA has predicted that by 2025 that will be about 30 percent of our mix of production here in the U.S.

There are other important things that are now becoming a larger play, which is the next generation that follows thereafter. For example, we have already seen the development of the tar sands up in Alaska. We have a situation in the western States, some shale, where the Government indicates that we have the potential for a trillion barrels of reserves in shale, which would be four times all the oil and gas that Saudi Arabia has right now.

One of the things that needs to be brought to bear there is technology to get the cost down to produce to be able to put that forward. So there are also things like methane hydrate.

So in the industry, huge amounts in technology--because not only do we have to serve today, but we need to be ready to serve the customers of tomorrow. That is why we are so capital intensive, because that money continually gets reinvested.

MR. HALL. Is the quantity and quality of shale well known and can be documented?

MR. CAVENEY. Reasonably well known.

The industry with the help of the Government, and the involvement during the 1970s was very active out there. What happened was, as you recall, after the second oil shock in the 1980s, the industry underwent windfall profits and a number of other controls, and the price just collapsed. So most people abandoned their efforts out there at that time because it just wasn't economic and the Government shut down their

involvement. A couple of companies have stayed active in the research areas and think they have made some gains, and that is why we are now seeing more interest there. DOE has a couple of grants to look at it, and it may be one of those things that eventually may find a home in our mix.

MR. HALL. How would you rank them, then? Briefly.

MR. CAVENEY. Well, I think there are some technologies that are very attractive.

MR. HALL. And assuming they are available and can be done, it is just a matter of money, and put R&D into the program as much as you do the energy program.

MR. CAVENEY. One of the ones we are already seeing is, looking at the biofuels, you would have thought, 10, 20 years ago, the addition of ethanol into the fuel mix was seen as basically an octane enhancer. Increasingly now it is finding a larger and larger role. That is why we worked on the historic removal of the fuel standard, to be able to build that industry up so that it can produce more. We also have the biodiesel parts that are coming in.

So the technology is doing very well there. We need cellulosic ethanol to be able to continue the growth of ethanol. So that one, I would say, is really the next one up on the platter.

Just behind that are things like the technologies that we have heard about for a number of years which are a coal-to-liquid gasification, these kinds of technologies, which there are sample projects that are along, and that is probably a step ahead of looking at. Let's say shale, which might be the next one beyond that. And I might also add, we don't have much of an opportunity for utilization of the tar sands and the coal sands, but a lot of the stuff that comes from up there is now being piped down into the U.S., which has been very helpful to us. So technology is applied there in terms of pipelines reversing their historic flow.

So those would be the areas of the largest anticipated growth as we go forward, the deep water, the exploration--and that is why looking at Lease Sale 181 and looking at the OCS are important areas for us to be able to define the extent of the resource there. Because it may well be that we can get things there more quickly and at more commercially available terms, which ultimately will translate to more affordable fuels to the consumer.

But important among all of these things is, if we want to enhance our energy security, if we want to have more flexibility, looking at these domestic supplies makes a lot of sense.

MR. HALL. Chairman Barton has ushered through for the first time in 10 years an energy bill. It is not everything we wanted, but it is an energy bill and signed and ready to go and working toward it. I think you have given him a good wish list there to get after, and we are going

to be very supportive of him as we pursue those. Because those are things that can save a generation from having to cross the ocean and fight a war, and that is the goal.

Ms. Eshoo, I am sorry. I went over a little bit. I recognize you at this time.

Ms. Eshoo. Good morning to all the witnesses.

My question--I want to direct my question to Mr. Caveney. In your testimony, you noted that there are announced refinery capacity plans that will add 1.3 million barrels per day of additional refinery capacity between 2006 and 2011. These expansions, as you have stated, will boost capacity to 18 and a half million barrels per day. Current demand for petroleum is more than 20 million barrels per day and projected to continue to grow, and we make up the difference by importing product from overseas.

In its 2006 annual energy report, the EIA projects that the gap between demand and domestic refinery capacity will grow, which means that, in addition to crude, we are going to import more gasoline and other refined products. Now if it makes us vulnerable to be increasingly dependent on crude imports, it seems to me that becoming increasingly dependent on imports of refined products carries similar dangers. Can you tell the committee if you believe domestic refining capacity will ever catch up with demand or is the gap going to continue to grow?

MR. CAVENEY. I would like to associate myself with Bob Slaughter's comments earlier. It is not necessary and probably not likely that we would have to have 100 percent of our usage satisfied by domestic production, but it is certainly healthy for us to have a strong, vibrant national refining network. So we feel that the additions that are announced, there may well be other ones under consideration. Some companies have a policy--

Ms. Eshoo. So you don't believe that it would be prudent policy to become dependent on refining capacity or crude--you know, the refined products being imported? Are you agreeing, is that what you are saying?

MR. CAVENEY. It is not--

Ms. Eshoo. I can't tell by what you have said.

MR. CAVENEY. Okay. It is not necessary that we have to produce, I feel, 100 percent of the product we use in U.S.-based refineries. We have reliable supplies from Canada coming in.

MS. ESHOO. I think we are disagreeing with one another.

Can you explain then--is ExxonMobil part of your trade association?

MR. CAVENEY. Yes, they are.

Ms. Eshoo. --why ExxonMobil says it doesn't plan to build any new refineries in the United States? Do you know if they are revising this, if they have moved in another direction, if they have any other plans?

I mean, we have gas now at--well, in California, it is well over \$3 a gallon. Are they looking for new ways to invest their record profits?

MR. CAVENEY. Those kinds of discussions are privy to individual companies, and under those kind of circumstances we are--

Ms. Eshoo. Are you aware of the comments of ExxonMobil?

MR. CAVENEY. I am aware of those comments, yes.

Ms. Eshoo. And do you want to comment on those comments? I mean, they run contrary to what, the committee is basing many of its--or at least some of its decisions on.

I see that the distinguished Chairman of the full committee is laughing, except it was our staff here at the committee--

CHAIRMAN BARTON. Will the gentlelady yield?

Ms. Eshoo. I would be glad to.

CHAIRMAN BARTON. I am not laughing at you. I am just saying how--

Ms. Eshoo. The subject matter.

CHAIRMAN BARTON. I am just thinking how unfair it is of you to quote their own words. It is a low blow to use what ExxonMobil has actually said against them. I mean, that is kind of a cheap shot, don't you think?

MS. ESHOO. Well, I think that is what my constituents would want me to do. It is their quote.

CHAIRMAN BARTON. I agree. I have had to defend their right to say what they say, but if I had just reported--

MS. ESHOO. Well, of course they can say what they say--

CHAIRMAN BARTON. I think they reported a \$9 billion quarterly profit, and if that is true, I believe they could find the money, if they wanted to, to at least expand one of their existing refineries.

MR. CAVENEY. I don't know the exact nature of the quote, but they have a history--

Ms. Eshoo. I will have my staff bring this to you. Do you want me to read it to you?

MR. CAVENEY. Fine.

Ms. ESHOO. Exxon-this is a January 25 Reuters report, "An ExxonMobil corporation official told congressional aides this week," this is the week of the 25<sup>th</sup> of January, "that flat North American demand for gasoline forecast through 2030 means there is no need to build new U.S. refineries, a congressional source sold Reuters on Wednesday."

"Scott Newman, manager of Exxon's Economics and Energy Division, on Tuesday briefed aides with the U.S. House Energy and Commerce Committee on the company's oil demand outlook, according to the committee staff member who attended."

"Exxon said they don't want to build any new refineries in North America because of flat demand for petroleum products by 2030. Spokesman for Irving, Texas, based ExxonMobil, the world's largest publicly traded oil company, declined to give specifics of the meeting. We think the most cost-effective and efficient and effective way, the fastest way to add capacity in the U.S. is to refine our own refineries."

Do you know what "refine our own refineries" means?

MR. CAVENEY. I think what was meant there was to add capacity to existing refineries, which is, as Mr. Slaughter had said earlier, the quicker and more cost-effective way to add capacity in the U.S. And his statement about not doing anything was a new refinery, not additional capacity. ExxonMobil has a history of continuing to add capacity to their existing refineries.

MS. ESHOO. Well, this runs contrary to what you are saying, but I appreciate your response.

The reason why I raised the issue of demand is because Exxon contradicts EIA's official projections for demand. So there is a disparity there, and I think it is something that the committee needs to recognize.

I think my time has--

MR. HALL. The time has expired.

MS. ESHOO. Even though the Chairman used up some of my time. Thank you.

MR. HALL. And we weren't laughing at you. We were laughing with you. We were thinking about the lady who came over --

MS. ESHOO. This is strictly business, Mr. Chairman; and I understand that.

MR. HALL. We were thinking of the lady who came over yesterday trying to defend the Administration's cutting Children's Hospital's teaching fund. She didn't really want to be here, probably didn't really want to answer that question. I wouldn't have if I had been her. But you ask good questions. We admire you.

Ms. Eshoo. Thank you.

MR. HALL. We weren't laughing at you.

Ms. Eshoo. Thank you, Mr. Chairman.

MR. HALL. Okay. The Chair recognizes Mr. Bass.

MR. BASS. Thank you, Mr. Chairman. I want to thank the Chair for holding these hearings. They really are very informative and helpful.

If we are looking for ways that we can deal with stabilizing and reducing energy costs over the short term, medium term, and long term; and as gas prices have risen, we have heard about a lot of things that we can do right now that would make a difference tomorrow or next week or the week after. Do any of you have--let me communicate a couple of these things that, or ideas that I have heard.

One of them was that if every American consumed one less gallon of gasoline a week, the cost of gasoline would go down by 60 cents a gallon. One myth. Maybe it is a myth; maybe it isn't. But if we were to use more diesel in America, we could use CAFE standards by anybody's predictions almost immediately. If we could increase the use of hybrids significantly, immediately this would occur.

My question is, could any of you make recommendations or suggestions to the committee of efforts that we could undertake that would make an immediate impact or have an immediate impact on the price of gasoline in America? I mean between now and the end of the year.

Go ahead, sir, Mr. Caveney.

MR. CAVENEY. Mr. Bass, it is hard to project anything that would immediately, let's say on a 24-hour period, have an impact.

One of the things that people can individually do without sacrificing anything, and we have located on our Web site, is you can actually use energy a bit more wisely, particularly in motor transportation. You can gain 4, 5, 6, 7 miles per gallon by doing some of the very simple things like eliminating jackrabbit starts, making sure your tires are properly filled with the level, having your car tuned, driving at 10 miles per hour less. That done broadly would not be anyone sacrificing anything, and in a reasonably short period of time that would show up in the data, and you would notice that there was less demand. Obviously, that is what you are hoping to do, to create a wider gap between supply and demand.

MR. BASS. Does anybody have any comments on diesel utilization, use of more diesel in America?

MR. SLAUGHTER. I would like to say something, if I could, on that, Mr. Bass.

The diesel market in the United States is pretty well already subscribed. We are introducing a new 15 parts per million sulfur diesel product on June 1<sup>st</sup>, and we are putting that program into operation this year. We are going to see how that goes. We have been working very hard for a smooth transition.

But, as has been mentioned earlier by Mr. Cavaney, Europe has gone to diesel for light duty vehicles, including passenger cars. It has freed up gasoline to be exported to the United States, particularly to the Northeast, which is 25 percent dependent upon imports. If the United States tried to switch in a big way to diesel, we might have more difficulty finding imports of diesel than we currently are having imports of gasoline.

So the refining industry in the U.S. is built towards the current mix of about 49 percent gasoline output, less output of diesel. There is going to be an increase, all analysts say, in the number of diesel cars in the

United States over the next few years, but it still will be significantly below the figure for gasoline-driven vehicles.

MR. BASS. How practical is it for refiners to switch to diesel and provide more diesel in North America for a short period of time?

MR. SLAUGHTER. Well, for a short period of time there are some things you can do. Refiners do respond to shifts in the market where there is a need for more diesel product than gasoline. There are some things you can do, within limits, to produce more diesel and less gasoline. But the kind of program you are talking about, that would be significant. It would take much longer and we are already having significant problems. We are producing a cleaner diesel product that already is going to require more crude to produce than the old product did. So it is going to be particularly difficult to do that this year.

MR. BASS. But you do have clean diesel in Europe, right?

MR. SLAUGHTER. There is a cleaner diesel in Europe. We are going to have a cleaner diesel in the United States in less than a month.

MR. REID. Mr. Bass, in the immediate term, in terms of lowering gasoline prices for consumers at the pump, my testimony reflected that the only thing that SIGMA and NACS could recommend is temporarily suspending the tariff on imported ethanol, maybe worth a few cents a gallon.

Beyond that, a few of us have testified that crude oil accounts for the largest percentage in the cost of a gallon of gasoline. The second largest contributor to the cost of gasoline at retail is local, State, and Federal taxes. So we are not advocating it. We are not recommending it, but if you wanted an immediate impact, a Federal excise tax would be another place to look.

MR. BASS. Mr. Chairman, my short 5 minutes has expired. I yield back.

MR. HALL. I thank the gentleman.

The Chair recognizes the gentleman from Texas, Mr. Green.

MR. GREEN. Thank you, Mr. Chairman, for the knowledge of the committee.

There have been an expansion--in fact, I think our testimony yesterday from Dr. Yergin said that, since 1994, existing refineries added more than 2.1 billion barrels of capacity, the equivalent of adding a large average refinery each year. I will ask, is that an accurate statement we heard yesterday from Dr. Yergin?

Thank you.

And, Mr. Slaughter, you testified that refineries will be adding 1.3 million barrels in capacity in the next few years, and that is online.

MR. SLAUGHTER. We can currently count 1.4, and a lot of folks think it will be more than that. That is over 8 percent increase in the U.S. crude capacity.

MR. GREEN. I wasn't aware of the quote from an Exxon staff member to congressional staff members, but, just historically, I have represented now the largest refinery in the country in the Baytown, Texas, an ExxonMobil facility. When I was a State senator--before they changed our lines, and I got it back--it wasn't the largest.

So I am assuming, without documentation, that refineries--and I can say that typically up and down the Houston ship channel the refineries have expanded capacity over the last 10-year period, whether it is shale, whether it is any of our refineries, that they have expanded capacity. And we can find out the numbers. I think we will just have to do it individually. But I also understand that Exxon particularly adds about 200,000 barrels a day, every 3 years, to five refineries that they have. So there is expanding refining capacity.

There is still some space available in the Gulf Coast, although a question in a minute will be, we need some ethanol facilities here to serve our Houston markets since we no longer produce MTBE.

The Energy Information Administration's testimony yesterday said that if we reduced the number of so-called boutique fuels to improve the liquidity of the gasoline market we would have to sacrifice either price or air quality. Can you respond to that, Mr. Slaughter?

MR. SLAUGHTER. Well, there is a balancing act that has to be done with boutique fuels, Mr. Green. Because, as has been pointed out earlier, the Energy Policy Act passed in 2005, already started the process of looking at boutique fuel reduction. EPA's testimony yesterday indicates that there is only a handful, really, of boutique fuels in the U.S. If you change things right now, right away, some refiners would have to change specifications and invest more money than they had planned for, for the summer.

So it doesn't seem productive to go ahead with something like that now, although it is a good exercise; and the EPA shouldn be completing that exercise in just 8 weeks, is my understanding.

MR. BECKER. Mr. Green, may I comment, too?

This is probably one of the first times in the past 15 years where Mr. Slaughter's association and our association agree on a point.

Boutique fuels are an extremely important tool for State air pollution control agencies. As I mention in my testimony, they have reduced smog-forming emissions up to 25 percent. They have been prompted not so much by State and local permitting authorities but often times by the industry as a cheaper alternative to a uniformed Federal reformulated gasoline. So we agree with NPRA's position on that.

MR. GREEN. Let me get to another question, because I have run out of time.

Folks, Mr. Cavaney and Mr. Slaughter, last year, there was a refining bill passed after the energy bill; and since the Chairman is still here I want to make sure he hears this. Do your members--because during Rita and my experience in later September last year, and we saw what happened in the New Orleans area and along the Mississippi River, do your members work with the State emergency supplies to ensure we have enough fuel during an evacuation? In Hurricane Rita, we tried to evacuate at least 2 million people in the Houston area. Do State fuel supplies--do they work with members of your associations?

MR. CAVENEY. The industry, as well as local government and the Federal government, had post-hurricane conferences to actually go over the checklist of all the things that needed to be addressed, with a particular eye towards the human feature and then also the point you just raised, and they are working on that. It brought to light a number of things that people have taken for granted that would be done, but weren't, and they are getting addressed this time. So I think we will see a better response.

MR. GREEN. That is on the back end of it.

The front end of it, we had refineries, when we thought Hurricane Rita was going up to the Galveston Bay, that had to shut down. To get those refineries back on line, you don't just turn on a switch. It takes a lot of effort. And we did have some problems with power and things like that from other locations.

One of the interests I have, and if this committee does another bill, is to have the Department of Energy directly involved with both front end, if there is a problem with the big picture of getting refinery capacity back up, whether it is in my neighborhood or anywhere else, but instead of having to go through FEMA, who really doesn't understand--I mean, we saw what happened again from experience. Do you feel comfortable that the Department of Energy would be a partner that could be a problem solver in both getting the refining capacity back up but also looking at supplies for the evacuations?

MR. CAVENEY. I think, and Bob can speak from his perspective, that the cooperation was incredible. When you consider that we lost 30 percent of our refining capacity, and it came back as quickly as it did, some of the problems we had down there were equipment problems and things needed to be replaced and just couldn't speed up. But the government at the State and local and Federal level in almost every instance was just unbelievable.

MR. SLAUGHTER. I certainly agree with that, Congressman. It was a tremendous cooperative effort.

And one thing, there have been meetings, we had a large conference, for instance, in which to share all the lessons from our members with their experiences with the hurricanes, and I know they have worked with people in their localities and States to make sure that problems don't happen again. A lot of work has been done.

We are going back into hurricane season now, but I think people need to know that the industry has learned a lot from what happened last year about working with people, how important that was, the importance of electricity; and all those lessons are going to be applied this year. We have our fingers crossed that something like that won't happen again, but we have tried to be more prepared. And we were ready last year, but the faster you can respond, the better.

MR. GREEN. Thank you, Mr. Chairman. I have one more question. I don't know if we will have a second round.

MR. WALDEN. [Presiding.] We will have another round, I have been told.

The Chairman now recognizes the gentleman from Texas, Dr. Burgess.

MR. BURGESS. Thank you.

Mr. Slaughter, just continuing on Mr. Green's last thought, do you have a distributive network in mind for people getting caught in traffic jams if that happens again? Are we going to use the National Guard or State Guard? How are we going to get the gas to the people that need it?

MR. SLAUGHTER. Well, the industry has been working together and also with other folks to try to make sure that this distribution system works better this time than last time. What was a particular problem, as you know, and Congressman Green mentioned earlier, is that people didn't know where that hurricane was going to hit. It takes as much as a month to get a refinery started and back online.

MR. BURGESS. I was thinking specifically of the people who were caught in the contra flow freeway lanes, eight lanes coming out of Houston, Texas, when traffic wasn't moving and they ran out of gas. Are we going to have a way to get gas to their tanks if we have another evacuation ordered? Mr. Conley?

MR. CONLEY. If I just make one comment, I was in San Antonio last week for our annual conference and talked with a Mr. Jake Bailey from Bolero. One of his questions to me was, can we get more Texas carriers from other States, if need be, to help next time get the petroleum, the gasoline, down quicker?

One of the things I asked him is, what can we do to get the trucks going this way when everybody else is swimming upstream, and he said that they do have information from the State that they will provide patrol cars, State troopers and all. There is going to be a meeting I believe Thursday, which would be today, in Houston with Bolero and some of the other carriers, as to how to do that better next time.

MR. BURGESS. If you wouldn't mind just sharing that with this committee--I know it is a little bit off point, but if you get the information from that meeting.

Let me ask you, since we are already talking, you talk in your testimony about the tank trailers being used to transport ethanol; and in an ideal situation you would have them full both coming and going with ethanol to the plant and then reformulated gasoline leaving the plant. What are the barriers to doing that right now?

MR. CONLEY. Well, right now, it is a time type of thing. Again, you don't have as much demand certainly for ethanol as we do for the gasoline.

Take as an example, what we have been doing, one of our carriers, either by barge or by rail, a product comes into the harbor of Baltimore. They will pick it up and bring it into Newington. So, in the ideal situation, a Baltimore or a Virginia-based carrier can pick it up, bring it over here, a full load of ethanol, and then load gasoline on top and go out and make their delivery.

MR. BURGESS. I appreciate that.

In the interest of time, again, if you wouldn't mind providing us a written response of what we might to do make that happen with greater facility for your industry.

MR. CONLEY. I would be pleased to.

MR. BURGESS. Mr. Shea, in your testimony, you talk about renewable fuels. The E-85 has about 75 percent of the actual power--I assume E-85 means it is 85 percent ethanol--but you lose 10 percent of your actual power in a gallon of E-85. Do I read that in your testimony correctly there?

MR. SHEA. I am not sure you read that in my testimony, but maybe it is in my full written statement. Yes, I think there is power loss. There is no question.

MR. BURGESS. Actually, I guess it was Mr. Reid's testimony that I was reading here, on page 12 of your testimony.

MR. REID. There are fewer BTUs in the E-85 than in a regular gallon of gasoline.

MR. BURGESS. And yet the price is the same. We have heard testimony on that various times during the week. In fact, you have that in your testimony, that the price is not priced at a level that matches the energy content of a gallon of E-85. I am just concerned. Are we getting some ethanol price gouging here?

MR. REID. I am not in the ethanol business myself. I can't really comment on that.

MR. BURGESS. Okay.

MR. DINNEEN. Congressman, just on the E-85 question, it is true that in the flexible fuel vehicles that are being produced by Ford, GM, Chrysler today, there is a reduction in mileage because of the reduced BTU content of the ethanol. I mean, that is just a fact of science.

MR. BURGESS. But it is priced the same as a gallon of petroleum product?

MR. DINNEEN. Not in all markets. In most markets where E-85 is sold, it is sold at a significant discount to--

MR. BURGESS. Yet we have heard testimony to that effect during the week. I am concerned about the price of E-85, whether it is reflective of the actual energy that you are buying.

MR. DINNEEN. In today's market, though, most ethanol is being sold as a blend component with gasoline.

MR. BURGESS. Let me ask Mr. Becker a question before I run out of time.

On the current air quality, the reformulated gasoline and the boutique fuels that we have been discussing all morning, is there any difference in the engines that are sold today and the rules made for reformulated gasoline 10 or 15 years ago? Are we keeping pace with the changes in engine technology? We have heard a lot from Mr. Markey about how engine technology has changed. Are we keeping pace with that with our design of boutique fuels and reformulated gasoline?

MR. BECKER. Yes. The fuels have gotten cleaner, and the cars have gotten cleaner, and a lot of that is the credit of EPA and the stakeholders who have worked with EPA to make those--

MR. BURGESS. Does the design of our gasoline continually evolve then during that time?

MR. BECKER. Yes. There is lower sulfur fuel that is taking effect this summer. There is lower sulfur diesel fuel, and both those fuels will not only clean up the air directly, but cleaner sulfur, lower sulfur fuel will enable advanced technologies to work more efficiently than they otherwise would.

MR. BURGESS. Mr. Slaughter, you wanted very much to say something about the discussion of the memo earlier. Did you get a chance to cover your concerns, the refinery memo?

MR. SLAUGHTER. Well, actually, it was on the question about the ExxonMobil comment. You know, it is true that we have been adding a lot of capacity domestically at existing sites. You have them on tap quicker than you would with a new refinery, so the product then is available. ExxonMobil has added the equivalent of one new medium-size refinery itself in recent years, and that is by adding on to

existing refineries, the output of those additions were available for consumers much more quickly.

So all of our companies have made substantial investments. Bolero has increased the capacity of their refineries. They have purchased about 400,000 barrels a day already and are planning an additional 400,000 barrels a day of investment across the rest of its system in the years to come. So the refining industry made significant investments. That includes ExxonMobil and the rest of our members.

MR. BURGESS. I would point out that the profits for that don't just go to executives, but they also go to teachers, policemen, and retired people all over the country, the stockholders of those companies.

I yield back.

MR. WALDEN. The gentleman's time has expired.

The Chair recognizes the gentleman from California Mr. Waxman.

MR. WAXMAN. Thank you very much, Mr. Chairman.

Mr. Cavaney and Mr. Slaughter, I want to bring to your attention an article in the Associated Press dated April 10, 2006, entitled "Yuma Refinery Project Still Seeks Investors." As I am sure you are aware, a proposal to build a new refinery has twice received permits for construction. The first time was on January 16, 1992. Although a permit was in hand, the refinery was never built because the project didn't get financing.

The same thing appears to be happening today. On April 14, 2005, the Arizona Department of Environmental Quality issued another permit to Arizona Clean Fuels allowing installation and operation of the facility.

Do either of you have any information as to whether Arizona Clean Fuels has found investors for their new permitted refinery?

MR. SLAUGHTER. Mr. Waxman, they are members of our association. I don't have that information on financing. But let me say that there are difficulties with that facility, for instance as to crude supply for that facility, that have not yet completely been resolved. There have been changes in there that I think have affected people's ability or willingness to finance.

Now, supposedly they have some financing, but that's particular to the company and proprietary information, and I don't have it.

MR. WAXMAN. Mr. Cavaney, do you have any information on that? MR. CAVENEY. Not a member of ours.

MR. WAXMAN. Okay. Well, a year after receiving their permits, with gasoline prices at a record high and refineries reaping record profits, Arizona Clean Fuels is having a problem, and the article seems to indicate their biggest problem is finding financing.

The other point I would raise is that the Wall Street Journal pointed out that ExxonMobil now has \$32 billion in cash. ExxonMobil has

enough money to invest in the Yuma refinery if it wanted to, doesn't it, Mr. Slaughter?

MR. SLAUGHTER. Thank you. You know, people put their capital in the best investments. There is a lot of disagreement as to whether a new refinery is the best investment.

For instance, you know, ExxonMobil also has returned \$55 billion in the last 3 years to its shareholders. So a lot has been done with investment money and other money that ExxonMobil has. I mean, they look at refineries. They can look at exploration and production investments

MR. WAXMAN. Would it be unfair if someone said that ExxonMobil didn't want to build any new refineries because new refineries might reduce their justification for higher prices?

MR. SLAUGHTER. Yes, it would be very unfair.

MR. WAXMAN. Okay, thanks.

Now, Mr. Caveney.

MR. CAVENEY. Yes, sir.

MR. WAXMAN. In your written testimony you said API supports increased energy efficiency in all sectors of the economy, including transportation, as an essential part of efforts to meet U.S. energy challenges. And Mr. Slaughter emphasized the importance of CAFE in his oral testimony today.

Mr. Cavaney, is it your position that if we are going to get energy efficiency in the transportation sectors, that if fuel economy standards are revised, we should, in fact, have efficiency increased and not decreased, and a guarantee to that effect?

MR. CAVENEY. We feel it should be increased in all sectors, and that does include transportation, because there is less flexibility in the transportation sector than any other for the use of energy, and it would be very helpful.

MR. WAXMAN. You didn't mention that last year when you testified. Any reason why not last year but this year you have come out with this position?

MR. CAVENEY. Well, the one thing that we have seen is that it is very clear the global pressure on supplies is great, and it is going to be a little while before that relief comes, and we think it just makes good sense over time to go ahead and take this particular approach.

MR. WAXMAN. Okay. Mr. Slaughter, you indicated that NPRA characterizes a current environmental agenda as a regulatory blizzard, and you seem to be blaming a tight gasoline market and high prices on environmental protections. You gave us a chart listing the burdensome requirements on refineries that drive high gas prices, and one of them

was boutique fuels cap. This is something Congress adopted last summer to limit States' clean fuels.

Isn't it correct that your colleagues in the oil industry had been calling for a boutique fuels cap for years while environmental advocates opposed it?

MR. SLAUGHTER. There is some disagreement in the industry on the boutique fuels issue. You know, we basically feel that the boutique fuels issue is not as serious as some people have suggested. A lot has already been done through EPAct. It is being looked at. We feel the tremendous improvements that have been made, for instance, in largely desulfurizing regular gasoline, is going to mean that regular gasoline and reformulated gasoline in the future is going to look relatively similar. We think fewer people will have a desire to go to boutique fuels because of that, and we don't really see a need for a limitation.

MR. WAXMAN. You also cite a renewable fuels standard, which was imposed by this Republican Congress, as another environmental problem that is driving up costs. If anything, ethanol makes smog worse, not better, and corn-based ethanol provides only marginal global warming benefits. To the extent that new ethanol plants are fueled with coal, ethanol doesn't provide any environmental benefits at all and likely would make things worse.

And I point that out just to challenge your assertion that Congress adopted the renewable fuels standard as part of an environmental agenda. These are not part of an environmental agenda. And I think that the charge that it is the environmental laws that are driving up the costs for gasoline is an unfounded one, and I certainly take issue with it.

My time has expired. Thank you, Mr. Chairman.

MR. WALDEN. The Chair recognizes the gentlewoman from Tennessee Mrs. Blackburn for questions.

MRS. BLACKBURN. Thank you, Mr. Chairman, and thank you to each of you for your time and your patience with us this morning.

Mr. Reid, I want to come back to you and Mr. Slaughter on the ultra-low diesel fuel for the summer. I am one of those, back in the late 1970s, when I had little kids, and we had the situation with the gas lines, I bought a diesel vehicle and loved it, used it, and found that to be a great way to work around the situation.

I know that as our constituents are looking for options, some of them are going to be looking at light trucks and diesel vehicles, and so I have talked to some of my oil marketers about the transition; the fact that you are going to have to have the fuel to the terminals in mid-July, and they have got to have it to the retailers in September. And I have listened to this discussion, as we are now in our third hearing on this issue, and we continue to come back to refinery capacity. We are at about 95 percent

refinery capacity, and during the summer we can go as high as 98 percent.

I am looking at this adding another requirement, and you all have talked about the different blends and getting things to the customers. So, Mr. Reid, I think you are probably--looking at the panel, and listening to you, you are the one that lives most in the real world. You are not here on the Beltway, and you are dealing with people that have got to deal with the customer who is putting that money on the table.

So, looking at what is considerably a high refinery utilization rate, and then adding on this requirement with the ultra-low diesel fuels, should we expect a price spike in diesel this summer?

MR. REID. I understand your concerns. I am really unsure as to how the markets will respond to the roll-out of the ultra-low sulfur diesel fuel. We have concerns it could create a price spike, but it is really uncertain. Refiners tell us that supplies will be ample. There are still some issues with respect to how it is going to come through the distribution system.

MRS. BLACKBURN. You are confident that the supplies will be ample?

MR. REID. Yes.

MRS. BLACKBURN. Okay. And you were just talking about your distribution system. Go ahead and finish that.

MR. REID. Well, there are still challenges associated with getting the ultra-low sulfur diesel fuel from point A, where it is manufactured, to point B, where it is stored, distributed, and then down to the retail level --

MRS. BLACKBURN. Sure.

MR. REID. -- and maintaining the specification. It is an open question how that is going to work out at this point.

MRS. BLACKBURN. Do you feel like you have enough lead time?

MR. REID. We have as much lead time as we have.

MRS. BLACKBURN. You have got what you got. Well, the good thing is you all were looking at this as kind of being the year of fuel specification anyway.

MR. REID. Welcome to the party.

MRS. BLACKBURN. Yeah. Exactly.

Okay, Mr. Slaughter, do you want to add anything to that?

MR. SLAUGHTER. Well, I would like to say that industry has been working closely with all of their stakeholders to try to make this transition as smooth as possible. It is a daunting challenge. We have never made a product this low in sulfur. The 15 ppm is measured at retail. At the refinery, we are going to have to put out 5 to 7 ppm sulfur. And the difficulty is that it is extremely difficult to make.

Now, a lot of work has gone into trying to make this a successful transition, and our fingers will be crossed. We think we have done everything we can.

MR. BECKER. May I?

MRS. BLACKBURN. Yes, Mr. Becker, go ahead.

MR. BECKER. Thank you. I just want to echo what Mr. Slaughter said. This was a rule that was developed based upon compromises from the environmental health groups, the States, and the oil industry. It is a rule that is going to result in several thousands of saved lives. It is going to have a huge air quality benefit. It is going to have a huge economic benefit to this country. And it is one of the success stories that all of us collectively can brag about.

We would have preferred to see the rule implemented earlier, but as part of the compromise, we thought EPA did a fair job of bringing in the stakeholders and coming up with the deadlines that it did.

MRS. BLACKBURN. Okay. Mr. Slaughter, go ahead.

MR. SLAUGHTER. I wanted to add one additional point, since we have talked a little bit about numbers and profits today. The cost of this program is \$8 billion. That is on top of the \$8 billion the industry spent to reduce sulfur in gasoline.

So I just want to point out that it is a very significant commitment of this industry to new investment for environmental reasons to make this product for the U.S.

MRS. BLACKBURN. I appreciate that.

Mr. Slaughter, I am going to run out of time, and I had really wanted to talk with you about New Source Review. We have done some things on that and have had some things included in the GAS Act that we passed in the House. It didn't pass in the Senate. And the more I hear and read, and the more I look at New Source Review, I think we were right in the actions that we took on the GAS Act.

I will submit this to you in writing, but I think it is an important part of the record in looking at New Source Review and those requirements and how it may either enhance or stifle and prevent investment in refineries here.

I think Mr. Cavaney was trying to recall that number of refineries that we had had, and our committee work shows that we have not had a new refinery since 1976, and in 1981 we had 324 total. Today we have 148. That is of concern to us, and I would appreciate your response in writing, and I will submit the question to you in writing.

MR. SLAUGHTER. Thank you, I will.

MRS. BLACKBURN. Thank you. I know my time has expired. Thank you, Mr. Chairman.

MR. WALDEN. The Chair recognizes the gentleman from Washington State Mr. Inslee for questions.

MR. INSLEE. Thank you. Really appreciate you all being here.

Just to let you know, there are some sort of bold ideas floating around in Congress now. One is called the New Apollo Energy Project, something I am cosponsoring with a bunch of folks who really believe that we need to take some very bold steps in energy, not just little baby steps. We call it the New Apollo Project because we think we need something of the same scale as Kennedy challenged us to in 1961. We don't need that little small step for man, we need a giant leap for mankind in here. So I appreciate your being here to talk about it.

I want to talk to you about ethanol and flex fuels and how we develop infrastructure in that regard. Some of us have been looking at the experience of Brazil, where they have had considerable success. We are told about 40 percent of their transportation infrastructure is now fueled by ethanol, principally from sugar cane in Brazil. That resulted from pretty aggressive, pretty assertive, pretty visionary actions by Brazilian leaders over the last couple of decades actually to develop both a demand on the demand side for ethanol, which, as we know, is a great product because it reduces CO2 emissions, and we have a global warming issue we have to deal with, but also on the supply side to help development of the infrastructure so that that E-85 is available at the pumps for their consumers.

Now, what the Brazilians tell me is that they sort of felt both was necessary; that it was necessary to help the supply side to provide some incentives, some assistance to the suppliers to help the infrastructure development to put in those E-85 pumps, and to develop the refineries and the transportation infrastructure, but it was also necessary to help on the demand side when they have helped Brazilians get these flex-fuel vehicles that can burn either gasoline or ethanol.

So I guess what I would just ask for your thoughts on are, is that the right strategy? Do we need to do both? And if so, what are the most effective things on either approach to try to inspire that progress?

MR. DINNEEN. Congressman, Brazil has done a tremendous job building an ethanol industry through tax incentives and mandates for use. And actually, they built their ethanol industry largely first, initially, through a blend market, requiring ethanol to be used and blended with gasoline. They had blended as much as 25 percent with gasoline in vehicles that were on the road. It has only recently been that Brazil also required the availability of E-85 and provided additional incentives for E-85 vehicles. That program has indeed proven to be extraordinarily successful.

In this country, we are still working through ethanol as a blend component with gasoline, and there is tremendous room for growth as ethanol becomes a more ubiquitous component of the motor fuel market as a blend.

For ethanol in this country to be more widely used as an E-85, several things need to happen. You need to have more vehicles. We have 5 million E-85 vehicles on the road today. That is a good start, and I give great credit to Ford, General Motors, and Chrysler for the commitment that they have made toward those vehicles, but it is not nearly enough. It is not enough vehicles to attract a gasoline marketer to put in an E-85 fuel pump.

You need more pumps. We only have 650 E-85 pumps across the country, out of something like 130,000 gasoline stations across the country. You need to have more infrastructure. That will come as the vehicles come.

But there is one other very important component. You need more ethanol. I mean, to really replace gasoline, you are going to have to be talking about ethanol from cellulose. You are going to be talking about 30 billion, 40 billion, 50 billion, 60 billion gallons of ethanol. Congressman, you can't do that from grain.

MR. INSLEE. And I am very happy to report that the first commercial cellulosic ethanol plant is going to go in in my neck of the woods in northwest Idaho and is ready to go; construction is ready to start as soon as the loan guarantees are perfected. And I think that is a very exciting development, because cellulosic ethanol, of course, is going to have a production per acre severalfold what existing crops have. And when we do that, then we really are talking about a meaningful alternative to gasoline in this country.

I just want to let you know of some efforts going on here is that many of us think that while Brazil has provided some good vision, we don't have the luxury of time that they had, of decades, to start this transition. Our security needs in the Mideast, the science of global warming indicates that we have to get meaningful transition in the next decade or we are going to be eaten alive. We are going to be in areas of CO2 emissions that are so high that these changes are going to be irreversible.

And I, and I don't think I am alone, believe we have to act more quickly than Brazil did, perhaps in the same direction, but with much more dispatch. We just don't have this luxury of time. So one of the things we are talking about is trying to inspire more flex-fuel vehicles to be sold so that it will increase that demand so that the person can then afford to put up the pump because they know the demand is there.

In Brazil Ford is running commercials that has a young man pull up to a pump, and it shows him being indecisive. He can't decide between a blond or a brunette, between one diet pop and another, or gasoline and ethanol. He finally punches ethanol, which is the cheapest one at the moment. So that is Ford's marketing strategy in Brazil, and we want to have the same strategy here.

Did you want to make one comment? I have brief time.

MR. SLAUGHTER. Yes, Mr. Inslee. I would just say that the Brazilian project is very interesting, but apparently with a \$2.90 price for crudes for gasoline and for the \$2.90 price for ethanol here, and the \$2.38 price for gasoline he wouldn't be punching the cheaper option in the United States.

MR. INSLEE. That may be true today. And I will just tell you what my bet is on. My bet is on that there is not going to be a whole lot of new dinosaurs found to dramatically increase our fossil fuel production. My bet is we're going to find a lot more Chinese demanding automobiles, and that the price of fossil fuels is going to-over a long term is going to go up, and the price of ethanol, when we develop cellulosic ethanol, is going to go down.

So I think we should be putting our money in part on an alternative that is coming down rather than a horse that is going up. That is just one person's view.

MR. SLAUGHTER. Hasn't gone down yet.

MR. WALDEN. The Chair recognizes the gentlewoman from Wyoming.

MRS. CUBIN. Thank you, Mr. Chairman. I will be brief because most of my questions have already been asked and answered, and I appreciate that.

I would like to start with Mr. Shea. What insight can you offer as to what net effect the capping of boutique fuels, as mandated by Section 1541(b) of the Energy Policy Act, will have on national pipeline storage and transmission capacity?

As we continue to work to reduce the number of boutique fuels in the system, do you think publishing the list will be of any help in the management of our Nation's pipeline system?

MR. SHEA. I believe currently we are able to handle the transportation of the boutique fuels that exist. Our concern is if there is continued proliferation of boutique fuels and what impact that may have as it relates to pipeline capacity, through-put capacity, and also tank farm storage capacity.

We are in a position today, I think, in the pipeline industry, with the advent of the growth of boutique fuels, adding to that the phase-out of MTBE for ethanol, the phase-in of ULSD and such low parts-per-million

requirements, that the pipeline system is getting stretched to capacity in certain segments. So I guess my view would be that the capping of boutique fuels would be helpful at this point.

MRS. CUBIN. Mr. Waxman, I think, stated in one of his questions as he went along that ethanol was not cleaner, or it was less pollutant, I should say, than oil products. Can any of you respond to that?

MR. SLAUGHTER. I would be glad to say something.

MR. DINNEEN. And I will probably have to say something after that, but go ahead.

MR. BECKER. And then I will change his view.

MR. SLAUGHTER. The fact of the matter is there are differences. If you use ethanol, you produce aldehydes, which is a form of pollutant. If you use ethanol in the summer in gasoline, it increases the volatility of the mixture, and you basically lose about 5 to 6 percent of the volume.

MRS. CUBIN. Of the gasoline or the ethanol?

MR. SLAUGHTER. Of the gasoline. Because you have to back out some of the high energy content, but more volatile parts of the gasoline to accommodate the ethanol volatility number.

So there are new investments that have been made by the industry this year to accommodate that and to use ethanol in those areas. It is just that it presents different challenges, and the industry this year is learning how to deal with those.

MR. DINNEEN. Surprisingly, I actually agree with much of that. Ethanol has tremendous exhaust emissions benefits, reducing carbon monoxide and exhaust VOCs. As Bob indicated, it does have a higher volatility when blended with gasoline, so evaporative emissions increase. When used in clean-burning gasoline programs, however, refiners have to accommodate for that increased volatility by producing a lower-volatility blend stock. The refiners have made the investments to make sure that is possible.

So from an air quality standpoint, using ethanol in clean-fuel programs is going to have the same air quality benefits as any other fuel.

MR. BECKER. And if I may add to that?

MRS. CUBIN. Please.

MR. BECKER. I am going to say the same thing in different words.

In a few areas of the country, several areas of the country, where there is Federal reformulated gasoline and ethanol is being used, there shall not be any additional increase in volatility because of the specific cap in the Federal reformulated gasoline program.

In Wyoming and most other areas of the country that are using conventional gasoline that is going to have ethanol in it possibly. Ethanol is allowed a waiver to the volatility limits that gasoline had to

meet in the past. And so by regulation, by waiver, ethanol will be allowed to be more smog-forming than gasoline.

MRS. CUBIN. More what?

MR. BECKER. More smog-forming, more volatile than gasoline in the other Federal reformulated gasoline areas.

MRS. CUBIN. And at high altitudes, of course, that volatility problem is worse than it is at lower altitudes.

MR. BECKER. And this could be a problem.

MR. DINNEEN. But if it is a problem, the States have the authority to petition EPA to have that volatility waiver lifted.

MR. BECKER. And Mr. Dinneen is correct, but this is not an easy step, to overcome this obstacle that we face. And we are a fuel-neutral association. We don't have a dog in this fight about whether it is ethanol or any other additive. But you raised the question.

This is going to make it more difficult for States who want to meet their smog, their ozone standards to meet, because by regulation, by waiver we will see more emissions in conventional gasoline areas from ethanol. And to bring them down, we will have to convince EPA and seek that waiver, which is not an automatic waiver.

MR. DINNEEN. But EPA has never not approved such a waiver, and I guess I just have more faith in State air quality officials than Mr. Becker.

MR. BECKER. Excuse me a second.

MRS. CUBIN. So it depends on what chemical it is that you want to decrease. I mean, if you are talking about the hole in the ozone, we are talking about carbon dioxide. So that isn't an aldehyde.

MR. BECKER. The Congress has, in the Energy Policy Act, expanded the amount of ethanol, have codified the expansion of the amount of ethanol throughout the country. You raised the issue as to whether or not this is going to exacerbate air pollution, or Mr. Waxman raised it and you are responding as to whether it is going to exacerbate air pollution levels in some areas of the country.

MRS. CUBIN. So it will just be different pollution.

MR. BECKER. Unless EPA accepts the waiver request that the State offers, there will be increases in smog-forming emissions in those areas of the country that use ethanol where there is not Federal reformulated gasoline. I think that is a fact.

MR. WALDEN. The gentlewoman's time has expired.

MRS. CUBIN. Thank you, Mr. Chairman.

MR. WALDEN. For the record, we have a vote on the floor with about 7 minutes left. So I am going to ask a couple of brief questions, but before I do, I want to make one statement.

We have heard a lot over the last couple of days about the success in Brazil based and attributed to their increase in ethanol production, which is remarkable. But as I have looked into this, it appears that Brazil's energy independence really in large measure has come about because of its increase in crude oil production, which I am told is nine times larger than its increase in ethanol production between 2004 and 2005 and four times larger than the 2000 to 2005 period. And they are on track to increase their crude oil production even more, and ethanol plays a very small piece.

Now, I am an ethanol advocate, and I think we need to look at these alternative fuels. I think there is a lot of opportunity out there, but am I missing something here?

MR. CAVENEY. No, that is absolutely correct. Another thing happened back in the early 1970s. Brazil was faced with this problem of wanting to try to become energy independent. On the one hand, they went down the ethanol track, which we have heard a great deal about, but they also formed their national oil company, Petrobras. Petrobars has been very, very successful offshore of Brazil, making some very successful finds in the deep water and using that.

So, yes, their independence is in large part a combination of both of those things and not attributable to one or the other.

MR. WALDEN. But if the amount of crude oil production is up nine times over that of ethanol, how can you say it is not attributable one over the other? I mean, ethanol represents like .25 million barrels per day, and crude oil is 1.65 or something.

MR. CAVENEY. The point I was trying to make was that when it became clear that they were having these successes with their offshore production and all, they didn't feel they had to rely exclusively on ethanol to carry the weight of their goal of becoming energy independent.

MR. WALDEN. I guess that is what I am trying to figure out here. In my district we produce geothermal heat, we produce solar electricity, we produce wind power in copious quantities, and not just because I am upwind. You know, politicians. Never mind.

But we produce a lot of alternatives, and I am a big advocate for that. But I am also a realist to know that you can't rely on that totally. And it seems to me in America part of our energy independence has to also rely on increased crude oil production out of our own resources. Am I missing something here?

What rate of growth are we seeing on production of crude oil in America? Who can address that?

MR. CAVENEY. I can address that.

MR. WALDEN. All right.

MR. CAVENEY. You are absolutely right. One of the things people do is selectively take information out of the Brazilian experience and

bring it out to serve their own interests. And as Bob mentioned earlier, the success of getting ethanol going in the early years was mixing it with alcohol, alcohol and gasoline together. That is the same approach we recommend here, because what you want to do is to get the ethanol industry up as big and as strong and as flexible as it can be to withstand the huge swings that the fuels industry goes through.

And other people say, no, the Brazilian experience is you have to go to E-85. Well, there are 222 million automobiles and SUVs on the road right now, only 5 million of which--

MR. WALDEN. Where, here or Brazil?

MR. CAVENEY. Here in the U.S., only 5 million of which are flexible fuel. So you will have a very long wait if you focus on that.

So what we would like to see is continued U.S. production of crude oil here and conversion in our refineries, blending it with ethanol. We produce per gasoline 140 billion gallons.

MR. WALDEN. But I want to get back, because I am out of time, and I have to go vote on the floor.

How much is the crude oil production?

One comment to ethanol and alcohol. I didn't think you were supposed to drink and drive.

But, Mr. Slaughter, you indicated you might be able to answer that question. What is the crude oil production in the United States; the rate of growth?

MR. SLAUGHTER. Crude oil, well, it is small. Actually it has been negative in many years, but it has recently turned around a bit. There are several new projects, particularly offshore, that are very large that are going to increase domestic production slightly over the next few years. And, of course, ANWR would help a lot more.

But the fact of the matter is U.S. crude production has been on the decline more often than on the incline over the past decade.

MR. WALDEN. I am going to have to leave it at that because we are under 3 minutes now for the vote on the floor.

The Committee will stand in recess until about 1 o'clock or thereabouts, or a few minutes after the last vote.

Thank you.

[Recess.]

CHAIRMAN BARTON. [Presiding.] The committee will come to order. I thank you all for staying. I know it has been a long day.

We are going to start our second round. I know Mr. Boucher has asked questions the first time, Mr. Hall, and I think Mr. Bass. So the Chair will recognize himself for the second round of questions.

In my first round, I picked on Mr. Dinneen, so I am not going to pick on you this round.

MR. DINNEEN. Can I go?

CHAIRMAN BARTON. No, you can't go.

I want to ask Mr. Slaughter some questions.

We are beginning to increase refinery capacity again in this country. That is a true statement, isn't it?

MR. SLAUGHTER. Yes, it is.

CHAIRMAN BARTON. I think you said that about a million and a half barrels of projects have been announced. Most of those are expansion of existing refineries; is that correct?

MR. SLAUGHTER. I think they all are expansions of existing refineries.

CHAIRMAN BARTON. Okay. I also think you said that your trade group does support the refinery permitting reform bill that passed the House and is scheduled to come back up again next week.

MR. SLAUGHTER. That is right, we do.

CHAIRMAN BARTON. Now, my good friends, Mr. Boucher and Mr. Dingell, and I have many good friends, but those two good friends have announced, and may have introduced, a refinery bill. Has it been introduced yet?

MR. BOUCHER. [Nodding in the affirmative.]

CHAIRMAN BARTON. I haven't studied the bill in its totality, so if I misrepresent it, Mr. Boucher can correct me, but my understanding is that they would require the construction of brand new refineries for military purposes. And do you all have a per barrel per day requirement, Mr. Boucher?

MR. BOUCHER. Mr. Chairman, it would be 5 percent of the existing refinery capacity.

CHAIRMAN BARTON. So that is about 850,000 barrels, somewhere in that range. What would the industry position be on the Boucher-Dingell bill?

MR. SLAUGHTER. Well, I hesitate to say because I am not familiar with everything that is in the bill. I think if you are particularly talking about the idea of government-run refineries, you know, one of the questions would be what kind of role that it would play.

We believe that the domestic industry has shown, by significant investment in the domestic market, that we are very committed to it. The problem with new refineries, I will have to say, Mr. Chairman,--

CHAIRMAN BARTON. Look, this is no time to be reticent.

MR. SLAUGHTER. Well, with new refineries, just one question. We have always said that people who want to build new refineries should be encouraged to do so. One of our members is Arizona Clean Fuels, and we have worked with them.

One of the things I don't understand is what is the difference between the steel that goes into a new refinery and the steel that goes into an existing refinery? Because the existing refinery can produce more out of that steel in 3 or 4 years, when you don't know what you are going to get out of the new refinery.

CHAIRMAN BARTON. It is unusual for a witness to ask a question of Congress, but in the spirit of an open dialogue, to get to the bottom, I mean, this is a hearing about truth. So my answer to that would be that my understanding is that a brand-new-from-scratch refinery could use the best available technology, would tend to be built in a way that could refine any kind of crude oil and would probably be more efficient. So that would be the technical answer.

The political answer would be to show that we can. To show the American people and the world that we can still do things in America.

MR. BASS. Mr. Chairman, if you would yield. I am over here, Mr. Chairman, in front of you.

CHAIRMAN BARTON. Oh, Mr. Bass. I am looking down here.

MR. BASS. It is also the issue of geographical diversity which we need, and which you don't get when you expand an existing facility.

CHAIRMAN BARTON. Yes. But I would rather have existing refineries expanded than no capacity increase at all. But if we could do some diversification and take advantage of some of the newer technology, I think that would be a good thing.

One of the witnesses yesterday, Mr. Cooper of a consumer group, indicated that according to the Department of Justice, Antitrust Division, or maybe it was the Federal Trade Commission, they do a generic test for market concentration, and that in four of the five regions of the country, there is market power concentration in the refinery sector--in fact, in every part of the country except the Southwest.

What would your response be to that, Mr. Slaughter?

MR. SLAUGHTER. Frankly, I find that difficult to believe, because the refining and distribution system, for instance, in the Gulf, the Gulf supplies a great many products up the East Coast and into the Northeast. So I don't know exactly what they have decided the perimeters are.

Now, in the case of California, there are a limited number of refineries out there because most of the independents out there have gone out of business, with the exception of Valero and Tesoro. That is a separate case. And the problem is sometimes they are unable to permit an ethanol tank in California, let alone a refinery.

CHAIRMAN BARTON. I understand. My time has expired. My last question before I turn to--I think Mr. Stupak is the first Democrat. He was actually here at the opening bell this morning.

For both Mr. Slaughter and Mr. Cavaney, would your group be willing to engage in a series of off-camera discussions with myself, Mr. Boucher, Mr. Dingell, and Mr. Hall on perfecting the refinery permitting bill that we have got up to see if we could come to an agreement that would be bipartisan, that the industry would support, if we wanted to bring a little different refinery bill up in the next 2 to 3 weeks? Would you all be interested in doing that?

MR. SLAUGHTER. We would, certainly.

MR. CAVENEY. Yes.

CHAIRMAN BARTON. Would you? Okay.

I will yield then to Mr. Stupak.

MR. STUPAK. Mr. Chairman, before you have that discussion, is there any willingness in the industry, Mr. Slaughter, to even increase refining capacity?

MR. SLAUGHTER. Well, the industry has been increasing refining capacity every year. For instance, we were at 16.5 million barrels per day about 3 years ago. We went to 17.1. We are at 17.3 this year, and as I said, we are adding 1.4 million over the next 3 to 4.

MR. STUPAK. Sure, but since 1981, you have gone from 325 refineries down to 149 refineries.

MR. SLAUGHTER. But the refineries we have now are larger and more sophisticated and produce more product than those refineries did.

MR. STUPAK. Well, what is the one issue that would reduce the price of gasoline for the American consumer? If there is one thing you would say, what would it be? More refining capacity?

MR. SLAUGHTER. Well, the difficulty is the market situation has led to the prices we are seeing today, both for crude and gasoline. And I think the good news, as I talked about in my testimony, is that additional supply is coming on the way because refining--

MR. STUPAK. But that is in crude, right, not in refining?

MR. SLAUGHTER. Sorry?

MR. STUPAK. That is in crude, not refining.

MR. SLAUGHTER. Oh, no. But you need to recognize there are refineries that have just been in a very heavy maintenance season because of the hurricane last year. Those are coming back on line now, and there will be additional production of gasoline out of those refineries. And that should be very good news for this market. We can't offer you new capacity by a snap of the finger.

MR. STUPAK. No, I know that, but it seems to me we go through this every year about this time where we have an increase in prices, and it is switching over from winter fuel to summer fuel, you say. I would think by now we would have that figured out, after all these years.

MR. SLAUGHTER. Well, this year we had to switch over from MTBE to ethanol on top of it, sir, and that has greatly complicated the process.

MR. STUPAK. But MTBE has been on sort of the hit list for some time. You knew that was coming, right?

MR. SLAUGHTER. Well, it was 4 percent of U.S. gasoline supply. Last year it was still 1.5 percent, so it is not an easy matter to replace it.

MR. STUPAK. So if it is 4 percent, why then have prices gone up 70 some cents, or 72 cents?

MR. SLAUGHTER. It used to be 4 percent. It is now far less even than the 1.5 percent last year. But the prices have gone up because of the market situation and the tight supply/demand balance.

MR. STUPAK. How about the crack price we talked about earlier; that crack premium? You understand that? That is up, as the Chairman estimated yesterday, about \$30 when it should be about \$8.

MR. SLAUGHTER. The crack spread essentially represents market conditions. That determines what it is, and what goes in --

MR. STUPAK. Who determines the crack spread?

MR. SLAUGHTER. I am sorry?

MR. STUPAK. Who determines the crack spread?

MR. SLAUGHTER. The market does.

MR. STUPAK. Who is the market?

MR. SLAUGHTER. The market is basically what people are willing to buy our products, at which price and in what quantities.

CHAIRMAN BARTON. Would the gentleman yield on that?

MR. STUPAK. Sure.

CHAIRMAN BARTON. Mr. Slaughter, if you tell us what it is today, the EIA witness was a little unclear. He estimated it was about \$20, and my information was it was as high as \$30. If you could tell us, without being proprietary, generically, in general where it is today.

MR. SLAUGHTER. The charts that I have seen recently are usually between 30 and 20, and closer to 20 now. I will give you a new number. I haven't looked in the last couple of days.

CHAIRMAN BARTON. And what historically has been considered a fair spread, that at that level refineries can make a reasonable profit and stay in business? My number is it has been around \$3 to \$4 a barrel. Is that a good number or bad number?

MR. SLAUGHTER. That number I can't give you because I think it would vary from refinery to refinery. And, again, I would say today's situation, everyone agrees, is an extraordinary situation in terms of crude price, demand, and gasoline supply because of coming off the hurricanes. That is affecting that crack spread.

CHAIRMAN BARTON. I understand that.

We will give Mr. Stupak a little more time because I took some of his time, and I thank the gentleman for yielding.

MR. STUPAK. Well, between September 2004 and September 2005, according to charts we have seen, the refinery costs have gone up 255 percent. How do you justify that kind of increase?

MR. SLAUGHTER. I think you meant to say refinery profits, because that was the figure used earlier by the Chairman. I think that is a suspicious figure. I have not looked at that. I have promised to look into it and get back to you on the number.

There is no doubt that in the last 2 years refiners have been making more money than they have in the last decade. That is because it has traditionally been the least profitable sector in the refining industry.

MR. STUPAK. Sure, and that is why we have those closed refineries and the increase in price.

MR. SLAUGHTER. The fact of the matter is there has been significant investment in the refining industry in this country, and basically the industry is more competitive now than it was in the past.

MR. STUPAK. Well, how much has the refining industry reinvested into refineries? There has been no new ones. I mean, Valero had a 60 percent increase in the first quarter of this year.

MR. SLAUGHTER. And they have put 400,000 barrels of new capacity into the refineries they have purchased over the last few years, and are putting 400,000 new barrels of capacity into those refineries in years to come.

MR. STUPAK. And they had--6 months, ending in June of 2005, they also had a 60 percent increase. So even while they are increasing supply, if you believe that, they are still making 60 percent. So they are keeping their margins where they want their profits.

MR. SLAUGHTER. The margins are a product of market situation and what buyers will pay for gasoline and what crude oil costs us to make the gasoline.

MR. STUPAK. So bottom line is, basically, let the buyer beware as to the price.

MR. SLAUGHTER. No. The bottom line is, let the market work. It always provides the consumer with adequate supplies at the best possible price.

MR. STUPAK. Do you agree the risk premium is probably \$20 on a barrel of oil?

MR. SLAUGHTER. There is considerable disagreement on that. Some analysts feel there isn't any risk premium. I feel, just by reading the news, it looks like there probably is one, but I can't tell you how big it is.

MR. STUPAK. Do you think the trading of oil should be regulated by the New York Mercantile Exchange, as one-fourth of it already is?

MR. SLAUGHTER. I have to confess that I am unfamiliar with that bill, and I am going to have to look at it.

MR. STUPAK. I am not asking about the bill, I am just asking about the theory. If 25 percent of the oil traded on the market is regulated, why shouldn't the other 75 percent of the oil trades on the market be regulated?

MR. SLAUGHTER. I will tell you, I am not an expert on crude trading, and I just can't answer that.

MR. STUPAK. Mr. Cavaney, your industry is going to spend \$30 million on educating people on the reason gas prices are so high. How are you going to educate them? What is the message you are trying to give to the American people there?

MR. CAVENEY. What we came across was the fact that the public did not understand the energy industry whatsoever, particularly in oil and gas. And in order to help them understand, and hopefully be able to help guide all of us toward better solutions, we decided to have an educational advocacy effort, which was to explain to people where their dollar goes when they buy a gallon of gas and how it is distributed. We talk about our investment, how much it takes to put in, how long an investment you need to do, what the returns on the industry were. We talked about the commitment to reinvestment and our involvement with alternative fuels and the like.

So we are just in the process of trying to bring a level of education that frankly the industry had not really undertaken broadly over the past several decades.

CHAIRMAN BARTON. The gentleman's time has expired.

MR. STUPAK. Thank you, Mr. Chairman.

CHAIRMAN BARTON. The Subcommittee Chairman for Energy and Air Quality, Mr. Hall of Texas.

MR. HALL. Thank you, Mr. Chairman.

Mr. Conley, I suppose you would be the one I would want to inquire about truck carriers. In a day and time when airlines are flying full and going broke, and everybody knows the reason, what is the situation with the trucking companies? What effect do higher fuel prices--what impact is that having on them, as on other consumers?

And if there is a problem with truckers who may haul ethanol going out of business because of higher fuel costs, thereby reducing the number of ethanol shippers, what is the situation there?

MR. CONLEY. I don't think it would be fair to say there is a danger of the people that I represent going out of business because of fuel costs. They are absorbing some of them and passing some of them on. So I don't see that as a real concern.

There certainly are some challenges, as we talked about in the testimony, in trying to adjust to the different types of fuels. And with ULSD coming in, that is going to be another one. But the fuel prices, obviously, we are paying them. Some of them we are passing on, and some we are absorbing.

MR. HALL. Is that partially because some haulers are switching to hauling ethanol, and that is one way you are confident about the ethanol hauling capacity?

MR. CONLEY. It is kind of an interesting thing, and it is fortunate we were just down in San Antonio for our annual conference most of this week, as I mentioned. I was talking to people who are petroleum haulers, and, of course, they are hauling the ethanol. But you don't have to be a petroleum hauler to haul ethanol.

MR. HALL. Are the petroleum haulers the ones switching to ethanol? MR. CONLEY. Well, they are hauling it. Yes, they are. Some of them are using their trailers to haul ethanol. And, like I said, they can maybe haul gasoline back out in an ideal situation. There is just not that much demand right now for ethanol that that can be done in every case.

But the other side of it is, even for a gasoline hauler, whether it is a private fleet or one of ours, you don't have to have a petroleum trailer to haul ethanol. So people who don't haul anything in the petroleum industry, or have not, are now hauling some ethanol. So that is why I am confident that the capacity is there.

MR. HALL. Well, your testimony doesn't say it, but it kind of implies that there is or there may be some shortage of qualified personnel to haul ethanol.

MR. CONLEY. That is another issue, and I will be glad to talk about that.

MR. HALL. Tell us about that.

MR. CONLEY. Well, the biggest challenge facing the trucking industry today, whether it is the tank truck industry or any part of it, is drivers, finding the drivers we want out there, recruiting people to come into the industry. It is a very tough job. So that is an issue.

Now, in the area that I talked about in my testimony, it is the whole HAZMAT endorsement portion, to haul gasoline or ethanol, or any of these, you need your HAZMAT endorsement, which requires a fingerprinting procedure. I talked to one of our members this week who lost two good drivers because they just got tired of waiting in their State for the stuff to come back, and they went and got another job. So that is kind of an artificial pressure that has been imposed. That is why I suggested if we could maybe take another look at how that whole process works.

But the bottom line is, the biggest challenge we have right now is finding the kind of drivers that we are confident will do the job. And there are a lot of reasons for that we could talk about.

MR. HALL. There is another argument going on here in Congress about immigration. The House has passed a bill that protects the border, and the Senate has done practically nothing. Will our actions on immigration affect your acquisition of haulers?

MR. CONLEY. Over time it could. Again, a lot of our people are in the HAZMAT business, so it is almost another hurdle to get a HAZMAT driver. But, on balance, we have got many carriers that have immigrant drivers that are doing very well.

CHAIRMAN BARTON. Would the gentleman yield?

MR. HALL. Sure. I have sense enough to yield to the Chairman.

CHAIRMAN BARTON. You don't have to.

While we are on this, I just want to ask Mr. Shea a question, with our friend here from the trucking industry. I am told in Brazil that they can actually transport ethanol by pipeline, but in the United States we don't.

What does Brazil know that we don't know about ethanol transportation by pipeline? It would, obviously, be much easier to move around the country, especially to my part of the country, if we didn't have to use Mr. Conley's trucks or the railroad's tank cars. Not that we don't love our truckers or train guys, but we were able to transport MTBE gasoline by pipelines. What is the problem in the United States about pipeline transportation for ethanol?

MR. SHEA. First, let me say I am not sure why Brazil has been able to transport ethanol. I am not familiar enough with that. But the problem that we have is that, first, as you probably know, ethanol has a great affinity to absorb water, and most of our refined petroleum product pipelines are multiproduct systems hauling diesel fuel, jet fuel, gasolines, all different flavors and brands of gasolines, and there is inherently water in the pipeline system.

So to blend ethanol with gasoline and try and transport it is virtually impossible. The ethanol absorbs the water, drops out, and is out of specification at that point.

CHAIRMAN BARTON. What if we put ETBE in gasoline? Could you transport that in a pipeline?

MR. SHEA. I am not a chemist or an engineer. I am not sure of that.

Now, what I can say is that there have been tests; in fact, Buckeye has conducted one quite a few years ago where we stopped shipping refined products in a system up in Connecticut and Massachusetts, cleaned it out, because ethanol, of course, also is a solvent. So we have had to run a lot of ethanol through the pipeline to clean the pipeline out,

and we were successful in transporting on a dedicated basis a batch or two of ethanol.

But it takes large quantities of ethanol to make that economical. In our view, at this point, it takes a dedicated pipeline system to be able to transport ethanol and make it economical.

CHAIRMAN BARTON. It is Mr. Hall's time, but that question, Mr. Dinneen, and I think Mr. Slaughter wanted to comment on it.

MR. DINNEEN. I will be brief, Mr. Chairman, if I could, on this subject.

You are correct, Brazil does ship ethanol via pipeline. They ship it in a common carrier pipeline with a shipment of ethanol, and then a divider, and then a shipment of gasoline. One of the big differences is Brazil built its pipeline system to accommodate ethanol. So the pipeline system actually originates in the sugar-growing regions of the country and then flows to the population centers.

Our pipeline system was built to accommodate gasoline, as it should, and so it originates in the Gulf Coast and flows out to the East Coast, and north to the Midwest, and west to the West Coast. For us to even participate in that at all, we would first have to ship our ethanol from the Midwest down to Houston. Well, we can ship it via train or barge directly to the market it needs to go.

The other issue, of course, is just one of volume, and we are such a small component still of the U.S. motor fuel market that you would be hard-pressed to make it work on our pipeline system as it is structured today.

CHAIRMAN BARTON. Bob, did you want to say something?

MR. SLAUGHTER. Mr. Chairman, I was just going to give you an affirmative on whether ETBE could be shipped in pipelines with gasoline. Like MTBE, it could.

CHAIRMAN BARTON. It could?

MR. SLAUGHTER. Yes.

CHAIRMAN BARTON. Okay.

MR. HALL. I yield back my time and thank the Chair.

CHAIRMAN BARTON. Yeah, I took 4 minutes.

Mr. Boucher.

MR. BOUCHER. Well, thank you very much, Mr. Chairman, and I particularly want to thank you for the suggestion that we undertake a bipartisan conversation on a role for the Federal government in making sure that our Nation has an adequate supply of refinery capacity, and I look forward to that conversation. And I am particularly pleased to hear that Mr. Slaughter and Mr. Cavaney have also agreed to take part.

As we begin those discussions, there is some sort of baseline information that might be very helpful to have. So Mr. Slaughter, let me

ask you this: Can you tell me how many refineries have been closed in the U.S. over the last, say, two decades; or what the capacity of those closed refineries is? And then compare that refinery closure to the expected capacity that will come from the new investments that you have indicated in the expansion of current refineries now in operation.

MR. SLAUGHTER. Let me respond to that, to the extent I can. As I remember, the peak year for U.S. refining, number of refineries, was 1981. We were well over 300. In terms of capacity, we were at 18.6 million barrels a day, if I remember correctly. If you add the 1.4- or 1.5 billion in extra capacity to our probably 7.3 million barrels a day now, you would come up with 18.7. So we will be slightly above.

But, of course, that will be modern capacity with a lot more sophisticated technology than those old tea kettle refineries were. They were really very small refineries, and they were called tea kettle refineries because they couldn't really produce sophisticated products like gasoline in any sufficient supply.

MR. BOUCHER. So as the consumption of gasoline has continued to rise in the United States, we are going to find ourselves at the end of the expansions that your industry is currently projecting with essentially the same capacity we had in the 1980s. Do I interpret that correctly?

MR. SLAUGHTER. Well, actually, yes, 18.7 versus 18.6. But this is modernized capacity. You know, gasoline demand was down for most of the 1980s and started to come back up in the 1990s. And I don't know whether you are leading to the question whether we need to refine 100 percent of our product here in the United States or not.

MR. BOUCHER. I will be happy to ask that question, if you care to answer it. I think it might be a useful illumination of the record, in fact, to have your position with regard to whether it would be economically useful to do that.

MR. SLAUGHTER. Looking at the current situation, you would have to say that the market has not led to that result, which means that imports have optimized the system over additional refining capacity in the United States. It was easier to bring in the imports, cheaper, than to build the capacity in the United States and produce it here because of the myriad of difficulties, the additional costs that we have talked about all the time.

We believe that you should encourage the construction and use of domestic refining capacity, but if you go to 100, and that is not the most economical thing to do, you are adding additional costs to the industry and its products. That is the trade-off. You are going something where economics has not taken you, so you are adding additional cost.

Refining doesn't really work very well with the surge capacity idea because it takes a considerable time to start up refineries. You can't have extra refining capacity just sitting around.

MR. BOUCHER. Let me ask you this. Back in the 1980s, when we had 18.6 million barrels of refining capacity, what was the demand for refined product in the U.S.? Was it that number or a higher number?

MR. SLAUGHTER. No, sir. There was a considerable delta between gasoline demand in the United States and that capacity figure.

MR. BOUCHER. Well, a delta in which direction?

MR. SLAUGHTER. Oh, demand for gasoline at the time was substantially less than 18.6.

MR. BOUCHER. So you had an excess of refining capacity?

MR. SLAUGHTER. Yes, but--

MR. BOUCHER. So you have gone from a situation where you had an excess of refining capacity in the 1980s to a situation now where there is a capacity deficit, given the fact that the demand for refined product has increased in the U.S.; is that correct?

MR. SLAUGHTER. There is a deficit now, that is true. It reflects pretty much the situation in the world refining industry as well.

MR. BOUCHER. I think there might be some difference of opinion as to the economic utility of being able to refine 100 percent of the product here in the United States. We have heard your view. I am sure other contrary views would be expressed.

Let me turn, if I may, to another topic, and that is the potential for fuels created from other sources to help address the need for transportation fuels in the U.S.

Coal to liquids, we were told yesterday, is economic when the price of oil is \$40 per barrel. It is obviously well above that today. EIA projects that it will remain above that for the foreseeable future. And so one would assume that profit could be made in creating coal-to-liquid refineries in the United States at the present time.

So, Mr. Slaughter and Mr. Cavaney, perhaps, let me ask you if any of your member companies are demonstrating interest in building coal-to-liquids facilities? If any are, perhaps you could tell us who they are and where they are. And if there are barriers that are preventing that examination from taking place, perhaps you could tell us what those barriers are.

MR. CAVENEY. There are a number of companies, particularly the large integrateds, who are looking at coal to liquids, gasification, and a number of these sort of next-generation things. And the extent to which they have made commitments, they haven't made any commitments publicly about going full scale with a new refinery based on that.

But we would be glad to, if it is public information, make available to you the list and the information we have on who is active in each of these areas, and you can speak with them directly because they are in a position where they would be able to talk to you directly about what they are doing and things like that. They just haven't probably reached the point where they have their board approvals or anything like that to allow them to go public.

MR. BOUCHER. I would personally appreciate that sort of information, and others on the committee would as well. So if you could perhaps facilitate that discussion, I would appreciate it.

MR. BOUCHER. Mr. Chairman, if I could just indulge your cooperation for one more question, I would like to ask what our witnesses think the most likely source of a cellulosic feedstock for the United States might be. Corn is not economically efficient. According to many studies, you wind up spending as much petroleum to cultivate annually the corn and then harvest and process it as you get in ethanol on the other side. But with grasses and other kinds of biomass that regenerate naturally, that problem is not present, and perhaps those are economic.

So, Mr. Cavaney, what are your members, if any, looking at? Mr. Dinneen, you may want to comment.

MR. CAVENEY. Some of our members are invested heavily in cellulosic experimentation, and there is still some additional work that needs to be done on the enzyme packages. The difference is with both sugar cane and with corn, you can design one enzyme that will take care of converting the process, where, when you look at cellulosic, you have to be prepared to take a whole series of different materials in.

I think one of the most attractive ones would appear to be the issue of wood chips. If you think about that, the processing of trees that are harvested for lumber or paper, in order for them to do that, they tend to take something with a wide geographic spread and deliver them to one spot. So you would be able to centralize and get your raw materials fairly quickly, and I know that is one of the ones everybody is looking at a great deal. I am sure there are others, but I am familiar with that industry.

MR. BOUCHER. Mr. Dinneen.

MR. DINNEEN. Congressman, I know it will probably not surprise you that I disagree with some of the premise of your question with regard to the energy efficiency of corn. We have had that discussion before, but nonetheless, there is not an ethanol company that I represent that doesn't have a very aggressive cellulosic resource program going on now, in part because they all have cellulose already coming into the plant. There is cellulose in the corn itself that is not processed. So they are looking at that.

But there are other companies looking at other cellulosic materials right now. There is a company in Canada looking to build a plant in the United States that is looking at wheat straw. There are companies

looking to finance plants to British Ethanol from municipal solid waste. Certainly there has been ethanol production from waste wood, wood chips in the past and certainly can be again, people looking at research on switchgrass and other energy crops.

I think the marketplace ultimately will decide which of these makes the most sense, and probably all of them will at some point, because you can get alcohol from virtually any starch or cellulose-based material.

MR. BOUCHER. So you foresee a variety of refineries using various feedstocks placed around the country?

MR. DINNEEN. Absolutely.

MR. BOUCHER. Thank you, Mr. Chairman.

MR. HALL. [Presiding.] The Chair recognizes the gentleman from Texas, Dr. Burgess.

MR. BURGESS. Thank you, Mr. Chairman.

If I could ask Mr. Cavaney and Mr. Slaughter, over the past several days of testimony, it seems that the revapor pressure controls on fuels that States use to gain emissions productions when they choose not to participate in the reformulated gasoline program--how many levels of RVP control are there in use, and could any be eliminated?

MR. SLAUGHTER. Well, I have that here somewhere.

MR. CAVENEY. I don't have it, but I would like to make a comment. It has been said earlier several times, and I want to make a point, that the idea of trying to look at boutique fuels and reduce the number is going to cause some environmental degradation.

We have never, ever said that that is our interest. We think if you work together carefully--and we agree it shouldn't be done quickly, because there is a study under way--we think you can reduce the number of boutique fuels and do so without degrading the environment and harming the emissions. So both of those, especially when you look at the new generation of automobiles and the new cleaner fuels that are out, we think there is a great opportunity.

And I would disagree a little about the fact that it does make our system much, much more flexible, both the pipeline and the capacity to distribute it there, and also the slates that the refinery produces. If you are going to run one or two fuels all the way around instead of four or five during a day, you are, by definition, going to be more efficient and get more output. So we think this is a goal worth pursuing.

Roh

MR. SLAUGHTER. Dr. Burgess, unfortunately I have to say first that we have a different position on boutique fuels limitations. But we have currently RVP of 7.8, 7.2, 7.0, and 7.0 with sulfur provisions. So there are essentially four. Most of them are at 7.8 and almost an equal number at 7.0.

We believe that the impression is wrong that there are a great deal of boutique fuels out there now. We are concerned about a situation in which there would be a whole lot of new fuels in the future. That would add some difficulty, but we haven't seen that with the current slate. We optimize delivery of these fuels every day, Dr. Burgess.

MR. BURGESS. Has the EPA's waiver authority been useful in increasing the fungibility of the gasoline supply in times of shortages?

MR. SLAUGHTER. Very, particularly after the hurricanes last year. There was a cooperative effort among everybody concerned, including EPA. They moved very quickly to grant waivers in that emergency situation. They were very helpful.

MR. BURGESS. How long did that last, that waiver?

MR. SLAUGHTER. It lasted a month.

MR. CAVENEY. I think they put it in for 15 days, and I believe they extended a second time for 15 days, short-interval waiver.

MR. BURGESS. We have heard a good deal on the ethanol, and I appreciate you all have worked so hard to improve the infrastructure issues, but still the delivery of ethanol in my market, in the Dallas/Fort Worth market, seem to lag behind. Is there a reason for that?

MR. DINNEEN. Congressman, I think when the refiners made the decision to get out of MTBE and all those markets, they realized--we certainly did--that Dallas would be among the most difficult markets in which to make that turnover because the terminal servicing that area did not have rail access.

The market has responded. I think our industry has worked awfully hard. The oil industry certainly has as well, and we are servicing that market today. We are using transloading, where railcars are unloading directly to trucks, as was noted earlier, to service that market. Our industry is bringing product up from Houston, bringing product down from Kansas by truck as well. There is a terminal that is being permitted that will ease that situation significantly. It may be open now. If not now, it will be within days or weeks. But I think, by and large, while there were some initial hiccups down there, and the transitional issues were not ideal by anybody's standard, we are doing our best.

MR. BURGESS. May I ask when you were aware that there would be a problem? Can I ask when the industry become aware that there would be a problem? Do you recall?

MR. DINNEEN. I think when the oil industry decided we will get out of MTBE, and they evaluated the markets, I think everybody looked at Dallas and decided they would be a tough market.

MR. BURGESS. Was that with the passage of our energy act in August? Was that with the hurricanes in September? Was that later in

the fall? When did this sort of come, percolate to the top of the consciousness of the industry?

MR. DINNEEN. Are you talking my industry or the oil industry?

MR. BURGESS. Let us stick with yours since we shouldn't speculate-

MR. DINNEEN. Our industry obviously became aware of the fact that they were going to make this transition when their member companies came to our member companies and said, we need product.

MR. BURGESS. I guess just looking at it as a consumer, we wake up May 1 and we have high prices and some stations running out of gas, and some people ask me, legitimately, how come you couldn't see this coming? And apparently you did see it coming. Why we are not able to act fast enough to prevent or--

MR. DINNEEN. We have ethanol in that area. In fact, the trains are backing up, we have so much ethanol in that area. The terminals haven't necessarily been as ready as I think they could have been, but we have been working around those transitional issues as well.

MR. BURGESS. You go, but I guess it is the anticipation of the problem that bothers me. There will be other things that happen this summer. There will be other things that happen this fall. Are we looking out for those consumers in those markets and maybe negatively impacted?

MR. DINNEEN. I think both of our industries are clearly looking for whatever speed bumps might be in the road in the future, but I think the transition has been made. It has been successful, and it is a testament to the effort on the part of the oil industry and to ours that we have been successful in addressing some of those things.

MR. BURGESS. Mr. Chairman, may I have one additional question? It maybe controversial, but I would just like to follow up from some we have had, some of our hearings last year. Is it still necessary to have a subsidy for the ethanol industry?

MR. DINNEEN. Congressman, if you can tell me what the price of oil is going to be down the road, I think it would be a lot easier to answer that question. Certainly, in the past it has been difficult to get refiners to utilize ethanol in very strong economic conditions. But the incentive has been extremely successful in helping to build the industry and build the infrastructure, and done so in a way that is cost-effective for the Federal government because it reduces farm program costs. It increases economic activity in the rural areas where the plants are produced, and the analyses are that the Government actually saves money as a result of this program.

MR. BURGESS. But with oil at \$75 a barrel, the question has been legitimately asked in Mr. Cavaney and Mr. Slaughter's industry why

they continue to need subsidies, and, I guess, has the ethanol industry asked the same question of itself?

MR. DINNEEN. Certainly, it is an issue that we will work with the Congress on, with our member companies or with our customers on, to get to a day that we don't need to have government incentives. But in the climate that we have seen in the past, government incentives to encourage oil refiners to blend some carbohydrates as opposed to hydrocarbons has been incredibly important.

MR. BURGESS. What about the relaxation of the Federal motor fuels tax, is that still in place? The Federal excise tax on gasoline, is ethanol still exempted from that?

MR. DINNEEN. It is the same; the way ethanol is incentivized is by providing a tax incentive to oil companies for blended.

MR. BURGESS. Thank you, Mr. Chairman.

MR. HALL. You have done so good, I hated to stop you.

The Chairman recognizes Mrs. Cubin, gentlelady from Wyoming.

MR. GREEN. Mr. Chairman--

MR. HALL. The Chair reluctantly recognizes Mr. Green from Texas for a third shot at this group.

MR. GREEN. No. Second shot. This is only my second time. I think you will like what I am going to ask.

Let me follow up on Dr. Burgess. And I know there one time was incentivized for using ethanol, but today since there is no MTBE in competition, why do we need the subsidy for ethanol? I mean, the refiners I know are all trying to figure out how they are going to get ethanol, and since there is no competition--

MR. SLAUGHTER. Congressman, the incentive is going to be incredibly important down the road to encourage additional investment in this industry. If you are going to have cellulose ethanol production, which I think everybody certainly wants to see, having economic incentives for that is going to be necessary.

MR. GREEN. Okay. Let me--because I only have 5 minutes, and I am lucky to have that, Mr. Chairman, I guess. The concern I have in the Houston area, because we have used and benefited from reformulated gas that has been MTBE, I assume it is being barged in from the Midwest, not railcars.

MR. SLAUGHTER. I believe that is true for Houston, yes.

MR. GREEN. Those on the panel mention railcarring it or tankering it up from Houston to Dallas, because we checked yesterday and we were told that the maximum delivery of ethanol in Dallas is 23 cars a day. And I assume it is Union Pacific, maybe Burlington, that serves those areas--200 railcars, backed up waiting to unload ethanol in the

Dallas/Fort Worth market. I am just glad that we can barge it in because, one, it is much cheaper, which gets to my next question.

There was some discussion about pipelining ethanol in Brazil, and, you know, I have just taken it as a fact that you could not pipeline ethanol, but someone did mention that ETBE is possible to pipeline because of the properties that it has.

Mr. Chairman, I don't know if the panel knows, and I know as a business major and a lawyer I don't have any idea about that, but I think it would be great for the subcommittee or the full committee to see if that is something we want to find out, maybe have another hearing with experts from the chemical side and people from the pipeline companies, see if that is a possibility, because we actually made 70 percent of the MTBE in my district, and back in the energy bill we talked about, well, we will have the option to do ETBE. And I want to see if that really is an option, now that we are not quite a year away from when the President signed the bill, that we would still have ethanol compound contents, but it would also be something that could be blended again in a chemical facility that at one time was able to do MTBE.

Let me ask Mr. Dinneen about the testimony yesterday from the Energy Information Administration. Ethanol supplies are tight now, and they singled out Texas, and we know Dallas/Fort Worth, because Dr. Burgess represents Fort Worth and Denton. What about the Houston market? Is there a problem in getting the barges in, or is there enough product in the Midwest to be barged out the Mississippi and intercoastal to us?

MR. DINNEEN. Absolutely, my understanding is we can't get much more ethanol into Houston, and there are barges in the canal waiting to be unloaded there as well. Houston has not been a difficult market for any of us at all. As I noted in response to Dr. Burgess, some of the ethanol for the Dallas/Fort Worth area is coming from Houston because we have so much there.

MR. GREEN. Okay. Again, Mr. Chairman. I would like to maybeif you could teach the Members of Congress some science on the possibility of pipelining either ethanol and seeing how they do it or, looking at the properties of ETBE, if that would make it easier to pipeline. Not that I want to take any business away from the railroads and the trucks, because, don't worry, there will be plenty of trucks on my Interstate 610 in Houston even if they don't haul ethanol.

MR. HALL. The gentleman yields back. Is it okay now if I recognize the gentlelady from Wyoming?

MRS. CUBIN. Mr. Slaughter, in your testimony you mentioned a number of fuels regulations coming into existence will serve to reduce

the necessity for boutique fuels. Can you provide any examples of any of those boutique fuels?

MR. HALL. Excuse me just a moment. Would you let me interfere? We have a gentleman at the table that needs to leave at this time, I am told. And we give you the right to go. Mr. Reid is it?

MR. SCOTT. He has already left. I can enter to replace him, Mr. Chairman.

MR. HALL. Well, you are a very good replacement. We will ask you about convenience stores in a little bit. Yield back.

MR. DINNEEN. Yes. I think I got the question. If you look at the EIA testimony and EPA's testimony from yesterday, a reason why people have gone to the boutique fuels that exist now is that they were a better fit for them than reformulated gasoline. They saved money. They had a supply of them, and they were just more economical.

In the future, reformulated gasoline and conventional gasoline is going to look a lot more alike, because the sulfur level has gone from a 500 to 30 ppm and with considerable environmental benefits, and as well there is going to be a limitation on benzene content. So they will look much more alike.

So we think there will be a natural confluence where people are going to an RFG that doesn't have a 2 percent requirement anymore. The oxygen requirement was removed by the EPAct. That really is what was driving people to other fuels. So that is going away. Conventional fuel is much cleaner. So we think that just naturally will mean most people will pick from one of those two. We can't prove it, but, it makes sense because the 2 percent was just lifted, so there isn't an example right now.

MRS. CUBIN. Okay. Good. Is it easier for a major integrated refiner like ExxonMobil to adjust to Federal and State fuels requirements, changes versus a small regional refiner like I would have at Wyoming? And if so, why is that the case?

MR. DINNEEN. Well, one might argue ExxonMobil is larger, has more investment capital, can make changes, but everybody basically wants to do that in an economical way. People who are writing regulations usually give special consideration to areas and types of facilities that might have different problems. Under the gasoline sulfur program and the diesel sulfur program, there was some special notice taken of the needs of smaller refiners.

MRS. CUBIN. Right.

MR. DINNEEN. So I guess the short answer is yes, there, are special difficulties that they have. I think regulators have tried to smooth it out as much as they could.

MRS. CUBIN. Thank you. That is all, Mr. Chairman.

MR. HALL. All right. Thank you.

This time we recognize Mr. Greg Scott and identify you as a representative of the National Association of Convenience Stores and the Society of Independent Gasoline Marketers of America. Thank you for joining the panel.

Chair recognizes Mr. Bass.

MR. BASS. Thank you very much, Mr. Chairman.

Mr. Dinneen, I have never been a big fan of the ethanol subsidy, but I was just wondering if you or anybody else has ever calculated the total incentives in royalty discounts that have been offered to the oil producers over the years and how that might compare with what is being offered in the area of ethanol.

MR. DINNEEN. Well, certainly that has been calculated. There are reports that I could submit for the record that I don't recall off the top of my head, but obviously the oil industry has been highly incentivized over the years and probably for all very good reasons.

MR. BASS. Would you be willing to supply my office and perhaps the committee with a copy of the report that you think is the most accurate in this respect?

MR. DINNEEN. Certainly.

MR. BASS. And if Mr. Cavaney wants to do the same thing, that would be great. I would appreciate it.

MR. BASS. Mr. Dinneen, I believe there are 166,000 gas stations in America, and probably--how many E-85 stations, 150, 160?

MR. DINNEEN. Six hundred fifty, most of them in Minnesota.

MR. BASS. Most of them in Minnesota. So how are we going to get beyond that problem? Is it not more expensive to have vehicles work on both versus just one, and what is going to happen with it, delivery issue?

MR. DINNEEN. We discussed earlier several things need to happen for E-85 to become a more meaningful component of the U.S. motor fuel. Clearly you need to have more vehicles; 5 million vehicles is just not enough to attract the kind of investment you need at the gas stations for refueling infrastructure. You need to have more pumps. A lot of that is happening. You see a lot more investment today in the E-85 refueling infrastructure.

MR. BASS. Is E-85 going to be any different in cost from gasoline? Car works on both, why would you bother, especially if it is more expensive?

MR. DINNEEN. In those areas where E-85 is widely used in Minnesota, for example, E-85 typically sells at a 40-cent or 50-cent discount to gasoline. Importantly, that is with the technology that is being used today with flexible-fueled vehicles, which, quite frankly, while very good, does not optimize those vehicles for the use of E-85.

General Motors has a new vehicle, a Saab 9-5, that is turbocharged, that has no mileage deduction when E-85 is used, and I think as you move down the road in the future, you are quite likely to see changes in technology on the vehicle side that make all of this a more economic option for consumers. The important thing is that they have that option, that they have the flexibility. I was able to drive here today in an E-85 vehicle.

So you are going to see a lot more of that on the road, but, look, it is going to take time, and the fact of the matter is the ethanol industry will need to grow as a blend component in gasoline significantly, and you need to have a heck of a lot more ethanol out there before E-85 can really take off.

MR. BASS. Is the Renewable Fuels Association promoting ethanol development and production from sources other than corn?

MR. DINNEEN. Absolutely. We are not the grain-based ethanol trade association. We have member companies that are looking at cellulose ethanol production today. One of my member companies is actually building a cellulose and grain ethanol production facility in Spain with the intention of bringing that technology to the United States very soon. Another member company has a cellulose plant in Canada right now that is looking to site a commercial facility here.

MR. BASS. Thank you.

Mr. Cavaney, are you aware of that bill that Senator Craig introduced recently that would allow us to drill or to bid in the Cuban Basin for oil-I think it is oil and gas. What effect would that have on U.S. energy security if it were permitted?

MR. CAVENEY. Well, I think it looks at the broader issue of the eastern Gulf of Mexico and the southern part of the tip of Florida. We have demonstrated, we think, through the hurricane season last time where we could have no production spills of any significance as a result of two Category 5 hurricanes. That has been the principal concern expressed by the State of Florida in keeping exploration and production so far off shore.

We would like to be able to look at circumstances where we are now disadvantaged by allowing national oil companies from China, from Venezuela and elsewhere to get within 50 miles and be able to explore and produce while the U.S. companies are being held off hundreds of miles off of the coast. It just doesn't seem to be a fair and equitable reason, so we would like to work with the Congress to try and see if we can't allow more of that Eastern Gulf to be made available for bid.

MR. BASS. Good enough.

I have one other quick question. Mr. Chairman. What is the turnover in gasoline inventory in the United States? I have been told that

17 days is a glut, and 10 days is a shortage. Is it that fast? Anybody know?

While you are talking to each other, I will pontificate here. I always thought that gas stations, they filled up the tank, and they came every other week or so. It turns out they come every other day. If you have a 17-day supply of gasoline nationally, you have a glut, and prices start to fall. And if you have a 10- or 11-day supply, you start having shortages. I want to know if you could correct that or tell me if it is accurate, if anybody knows; and if not, submit the answer for the record.

MR. SCOTT. Mr. Bass, from a retailer's point of view, it all depends on the volume of the retail outlet. A retail outlet might get a delivery of gasoline, say, once every 7 days perhaps if they are a fairly low-volume neighborhood store. A truckstop, on the other hand, may get five deliveries a day of diesel fuel. So it really depends on the type of the store.

I also believe you are referring to wholesale stocks, and those gentlemen are better able to answer that question.

MR. CAVENEY. If you take total inventory and divide it by demand, you are going to end up--historically would be about 22 days would be the inventory turn.

MR. BASS. What would you consider to be a shortage, how many days? Would it be 2 weeks?

MR. CAVENEY. Typically the Federal government, EIA, has listed what they considered to be a sort of a benchmark of minimum inventory before they start to worry, and that is 185, and that would be how many-185. And what do we do today? About 200 plus. As we have said in my testimony, we have ample --

MR. BASS. What does 200 plus mean?

MR. CAVENEY. Two hundred million barrels plus in inventory right now.

MR. BASS. Twenty days is the average inventory time in the United States.

MR. CAVENEY. Twenty-two.

MR. BASS. Twenty-two days. But what is the flexibility? I am sorry, Mr. Chairman.

CHAIRMAN BARTON. [Presiding.] We have so many other Members that need to ask questions.

MR. BASS. If you would be good enough to drop me a note and tell me that information.

MR. CAVENEY. We will give you some historical data as well.

CHAIRMAN BARTON. The gentlelady from Tennessee is recognized for 5 minutes.

MRS. BLACKBURN. Wonderful. You know us women, we are always talking.

CHAIRMAN BARTON. Take your time. I have plenty of questions. If you want me to go while you get ready.

MRS. BLACKBURN. No, sir, Mr. Chairman. I am ready, and I thank our committee Chairman for working this, and for our panelists for allowing us to jump in and out of this.

Mr. Cavaney, I want to come to you. With my first round of testimony, I had talked with Mr. Reid and Mr. Slaughter about some of the diesel requirements, but I wanted to come to you, Mr. Cavaney, because of the group that you head. And, of course, I understand why we have the prices at the pump where they are. You know, we have talked about refinery capacity, we have talked about supply and demand, but there is an incredible amount of frustration that is out there.

And I did a radio show this morning in my district in Tennessee, and one of the first things that came up was the retirement package from ExxonMobil, and this is something that gets people really angry. And I mentioned to the folks that were listening to the radio show today that we were going to have another hearing today, and that you all had consented to come in and to talk with us on this.

So I went to your Website, and for your trade association--and for the record, it is the American Petroleum Institute--and I looked on your Website where it says "About Us," and it says, and I am quoting from your Website, "Our association draws on the experience and expertise of our members and staff to support a strong and viable oil and natural gas industry."

And you also mentioned in your testimony today that the oil and natural gas industry understands the frustrations of consumers. And I just would like for you to explain for the record how in the world giving a \$400 million retirement package during a time where we have tight supply lines, where we have high prices at the pump, where we have high market pricing on a barrel of crude, where we have lots of questions that are being asked by consumers, how in the world does giving that kind of retirement package in this environment support a strong and viable oil and natural gas industry?

MR. CAVENEY. First of all, the area being discussed here, which is compensation, incentives, retirements, and so forth, is an area not within the jurisdiction of the trade association, so we do not deal in those specifics, so I have no basis. Typically though, as a matter of practice, public companies are held by shareholders who elect a board, and it is board and management who work out each individual company's specific pathway. And so I am just not in a position to pass judgment.

MRS. BLACKBURN. Well, I understand that, and we talked about that on the radio this morning, that it is the shareholders that are responsible for raising these questions, and I certainly hope that they do when you all have a shareholders meeting and this has the opportunity to be discussed with your shareholders. But I would just commend to you that that type action during this type environment seems to show very little understanding of what the consumers are thinking, which is supposed to be one of the missions, one of the things that you all are about. So I just-as a point of reflection and as a point where I commiserate with my constituents, that is something that is very difficult.

Mr. Slaughter, I wanted to come back to you. Going back, and as we have looked at the utilization, the refinery utilization, and where we are on those levels, we know we have got some pressures with the boutique fuels, with the diesel fuel that we discussed earlier, and we thank everyone for the work they are doing on those. But if we are running at a 98 percent capacity this summer, and we know at this point in time most of our refineries are in the Gulf, and what we are beginning to hear is it is going to probably be a very difficult weather season once again and could be for a few years to come. So going back to what we were discussing earlier with pricing, and looking at a price spike for diesel, if we have another hurricane, a Category 3 or Category 4 in August, and that knocks out, again, as it did last year, a large part of our refinery capacity, I think 25 percent of our refinery capacity was down for most of the month of September, then what kind of increase do you think that we are looking at for gasoline?

MR. SLAUGHTER. Mrs. Blackburn, one of the things I never do is predict prices. I will just say that last year, of course, after Katrina hit and the situation that you are talking about unfolded, prices for gasoline went above, slightly above, \$3. Those prices sufficed to bring in a record amount of imported gasoline into the country, as well as it encouraging other refiners that had any additional capacity at that time to run full out to try to make up for the gasoline that was not being produced in the affected refineries.

The only answer I can give to you, it would depend, and we hope that doesn't happen again, on the size of the outage, on the location of the refineries, but that the free market and market pricing will be the best way to get the product to consumers in that area.

MRS. BLACKBURN. Okay. Let me ask you something, and I understand and appreciate your answer. If we talked a little bit about the New Source Review and, of course, our original version of the GAS Act, what we would have liked to have done there, if we could go in and streamline the permitting process and--as the House had passed last year, and if there is a commitment from the industry to build refineries outside

the Gulf Coast, do you think that we will actually see refineries in other areas of the country, you all?

And through our hearings we have heard expansion is the better way to do this. It costs less, more cost-effective, they can get it stood up more quickly; but then on the other hand, one of the things that frustrates our constituents is they turn around and they hear, well, with everything down in the coastal area, we are looking at the same problem. So if the permitting is streamlined, and if some of the regulatory burden is streamlined, then do you think that it is feasible that people will actually look at other parts of the country for refineries?

CHAIRMAN BARTON. This will have to be the gentlelady's last question.

MR. SLAUGHTER. I suspect that would be very helpful. It would have to improve the economics. Right now someone looking to build a new refinery is looking at 10 years or more of delay. So it would have to be helpful.

I would also say some of the capacity improvements we are making are being made in refinement centers that are outside of the Gulf. So some of this additional capacity will come on in areas other than the Gulf.

MRS. BLACKBURN. Okay. Thank you very much.

Thank you, Mr. Chairman.

CHAIRMAN BARTON. And Mr. Becker wanted to respond to your question, too.

MR. BECKER. Thank you, Mr. Barton.

Mrs. Blackburn, thank you for asking that question because I would have liked to have responded when you asked it the first time.

One of the reasons that our associations representing State and local air pollution control agencies opposed last year's bill was because of the New Source Review provisions. We support the New Source Review. This bill would have codified into law a proposal by EPA that the courts have rejected, and I am going to give you an example of what it would do.

To build a new refinery today would cost in excess of \$1 billion. The EPA's rule would allow up to 20 percent of the capital cost of that to be spent for capital expenditures, and not misstating how much additional air pollution would go into the region, the source would not be required to meet the New Source Review requirements.

CHAIRMAN BARTON. That is not true. That is not true. It is required to expand up to 20 percent so long as the emission didn't exceed the old emission cap. That is true. That is true.

MR. BECKER. Where States have a State emissions cap, that is true, but many areas do not have an emissions cap.

CHAIRMAN BARTON. I was one of the authors of that section. We very carefully crafted it so that total emissions did not increase. If they tried to increase above what they already were emitting, they would have to go through the permitting process. But as long as they were expanding an existing facility, and they didn't increase emissions, they were constant or declined, they could do it. That is what it said. I don't want to get in a fight with you, but that is what it said.

MR. BECKER. I am not viewing this as a fight, Mr. Chairman. If a source makes capital expenditures without your bill or without EPA's rules and doesn't increase its emissions, then it, by law--by law you adopted in 1977--the source is not required to comply with the New Source Review. New Source Review is not triggered unless there is a substantial increase in emissions.

What EPA's rule does, and what the bill codified, is a program that was rejected by the courts because emissions were allowed to increase without triggering the New Source Review. I am happy to provide more information for the record so we don't--

CHAIRMAN BARTON. We can hold a hearing under Ralph just on New Source Review. I mean, that subject is worthy of a full-day hearing itself.

MR. BECKER. And I would agree with that.

CHAIRMAN BARTON. I am not being argumentive with you. I was very involved in that bill and that particular section, and we do not, under my stewardship of this committee, want to do anything that allows anybody in this country to increase their emissions above the current baseline. We are trying to be environmentally friendly. We don't get much credit from the environmental groups, but we have not done anything to allow industry to willy-nilly increase pollution and emissions. I am not going to do that during my chairmanship. Not going to happen.

MR. BECKER. That is good to hear. And if I may, just along those lines, I think you made a very nice gesture to my colleagues in the refining industry to bring them in on discussions with regard to refinery revitalization. And I would respectfully ask that, to the extent that you are trying to make improvements in the air pollution permitting provisions of that bill, that you also consider inviting State and local air pollution officials into those discussions, because we will all learn together what the industry needs and maybe what they don't need.

CHAIRMAN BARTON. Well, I am willing to do that if on the condition that the participants engage in a positive dialogue with the understanding that everybody wants the product to be the possibility of actually building or expanding new refineries or existing refinery capacity in this country. I am not interested in a dialogue where one

party is in there simply to sabotage, sandbag, prevent a positive outcome. But if your group wants to help us figure a way to do that, I would welcome you.

MR. BECKER. Well, I appreciate that. We are a group of State and local governmental officials. We never sabotage processes.

CHAIRMAN BARTON. I am not saying you do. I have been in negotiations where one party, the outcome that they wanted was nothing, they wanted to stop it. I would love to have the environmental groups participate in a positive way. That would be a refreshing change. I would just absolutely endorse that.

MR. BECKER. And just to make clear, we are not an environmental group. We are a group of State and local governmental officials, and we do--

CHAIRMAN BARTON. And maybe I should say this. My sister is an enforcement attorney for EPA in Dallas, so I know very clearly what group you personally represent.

MR. BECKER. I think what would be instructive is for the industry to challenge the premise that we bring into this debate that New Source Review and air pollution regulations have not interfered with the permitting of new facilities or delayed them.

In fact, I had a discussion before the hearing with Mr. Cavaney that what is most important to industry--we know, and I think they will admit--is certainty and the ability to plan. The stringency of regulation is subordinated by certainty and the ability to plan.

CHAIRMAN BARTON. Let me stop the clock. I want to ask a few wrap-up questions. Do you have one final question before I turn it over to myself?

MRS. BLACKBURN. No, Mr. Chairman. I will just say-again, say thank you to you for your leniency on the time, and thank you to our panelists for being here and working with us on this. And we do want to find an answer to some of the questions, and we appreciate the dialogue.

CHAIRMAN BARTON. I am going to recognize myself for the final question. We have a hearing on Social Security numbers in the Consumer Trade Protection Subcommittee that was supposed to start 20 minutes ago. So you will be happy to know this will be the final question.

I want to start with you, Mr. Becker. We have really kind of skated around the issue of MTBE. Would there be any interest by local and State air control pollution officials to find a way to bring MTBE or ETBE back for a period of time while we have all these gasoline supply problems? Because you were pretty adamant that ethanol, by itself, might not solve some of the air quality problems that we face. So would you think the group that you represent would be supportive of an effort

to resuscitate the MTBE industry for some period of time until we get ethanol distribution up and running and some of those issues settled?

MR. BECKER. Let me answer a couple ways. We are totally fuel neutral. We don't mind ethanol so long as it meets performance standards on a national basis.

With respect to MTBE, we don't have a position on MTBE. I know individual States do, and some of those individual States may object. Our national association doesn't have a specific favorite fuel.

CHAIRMAN BARTON. Well, there's no question MTBE not being in the fuel chain is causing price problems, and in some parts of the country, including the part I represent, supply availability, period. I am under no illusions that the MTBE industry is going to become a permanent part of the process, and I am not even sure it would be technically possible to do, but if the MTBE refiners haven't changed their systems in the short term it would definitely help the supply and the price to have MTBE available for this summer and perhaps through next summer. I am just asking if the air control people would be interested in being supportive of that. If you want to say no, say no. You seem to indicate you didn't think ethanol was going to be able to handle the air quality issue at least in the short term because they don't have enough capacity.

MR. BECKER. I don't think I said that. I think somebody else said that. But I think there is nothing that--

CHAIRMAN BARTON. No. I may misrepresent what you said, but you are the only one that raised it earlier in the hearing.

MR. BECKER. Well, I think I raised the issue about whether or not ethanol used in conventional fuels enjoyed increased flexibility, a one pound waiver to the volatility limits that will allow air pollution to increase. That is as far as I went on ethanol other than to say we are pretty fuel-neutral. With regard to MTBE, I don't know anything that Congress has done that precludes MTBE being used now other than--

CHAIRMAN BARTON. It is what we didn't do. Had we given a limited liability waiver for product liability--safe harbor simply is a defective product--the pipelines wouldn't have chosen to stop transporting it, and the refiners in the area where it is available would have continued to use it because there is no ban against it at the Federal level. It is a State ban, and that is fine. But when they didn't get the liability protection, primarily some of the pipelines decided they didn't want to continue to transport it because they might be subject to some sort of a liability lawsuit, and they just said, we are not interested, and if you can't transport it through the market, then that is that. No, but there is no Federal ban on it.

MR. BECKER. And others have weighed in on that issue. We haven't.

CHAIRMAN BARTON. Okay. I want everybody to answer this question. We will start with you, Mr. Conley. Would you support a suspension of the ethanol tariff for a defined period of time, no longer than 2 years, yes or no?

MR. CONLEY. We really don't have a position. We will haul whatever everybody gives us to haul. So we just don't have a dog in that.

CHAIRMAN BARTON. If you don't say yes, I am going to assume you are a no.

MR. CONLEY. Then you are saying no.

CHAIRMAN BARTON. Mr. Shea.

MR. SHEA. I would be in the same boat. I guess I would say no.

CHAIRMAN BARTON. Mr. Reid.

Mr. Reid. Yes.

CHAIRMAN BARTON. Mr. Becker.

MR. BECKER. No position.

CHAIRMAN BARTON. Then you are a no.

Mr. Slaughter.

MR. SLAUGHTER. Yes.

CHAIRMAN BARTON. I know you are a no.

MR. DINNEEN. Can I just get it on the record? No.

CHAIRMAN BARTON. Mr. Caveney.

MR. CAVENEY. No.

CHAIRMAN BARTON. You would say no? Why would you say no? That is a surprise.

MR. CAVENEY. I mentioned earlier, if you look at the CBI, Caribbean Basin Initiative, in other venues where ethanol can be brought into the United States, that is not necessarily even full up. It is only about half utilized, which would indicate that we don't have a problem of getting that stuff in here without having to pay any tariff. So that is the basis for ours.

CHAIRMAN BARTON. The Caribbean Basin Initiative hadn't used their quota?

MR. CAVENEY. Correct. There is quite a bit of room left in that. That comes in without the tariff.

CHAIRMAN BARTON. I guess I have a number of other questions, but we will ask them for the record. Thank you to each of you gentlemen.

MR. HALL. Mr. Chairman?

CHAIRMAN BARTON. Mr. Hall.

MR. HALL. Could I maybe have 30 minutes to summarize? I yield back my time.

CHAIRMAN BARTON. Well, this is an important hearing. Every poll I have seen show gasoline prices are one of the top three issues that the constituency of this country is worried about, and some of those polls it is the number one issue.

MR. HALL. Great issue.

CHAIRMAN BARTON. I am a little surprised we didn't have more Members here today, because when they go home, this is the question they have got to answer.

Anyway, thank you to each of you. We are going to adjourn this hearing and in approximately 15 minutes, reconvene at the subcommittee level to have a hearing on the Social Security numbers.

[Whereupon, at 2:25 p.m., the committee was adjourned.]

RESPONSE FOR THE RECORD BY S. WILLIAM BECKER, EXECUTIVE DIRECTOR, STATE AND TERRITORIAL AIR POLLUTION PROGRAM ADMINISTRATORS/ASSOCIATION OF LOCAL AIR POLLUTION CONTROL OFFICIALS

Response of the
State and Territorial Air Pollution Program Administrators
and the
Association of Local Air Pollution Control Officials
to Questions Posed on May 26, 2006
by Congressman John D. Dingell
Ranking Member,
U. S. House of Representatives Committee on Energy and Commerce
Regarding the New Source Review Permitting Process
and Boutique Fuels Provisions in the Energy Policy Act of 2005

## June 14, 2006

<u>Question 1:</u> Section 106 of the Gasoline for America's Security Act of 2005, as introduced in the House, amended the New Source Review provisions of the Clean Air Act. You testified in the hearing that this provision, if enacted, would allow sources to increase emissions significantly without going through the New Source Review permitting process. Please explain why you believe this to be the case.

Response: Section 106 states that the term 'modification' as used in both the New Source Review (NSR) program and the New Source Performance Standards (NSPS) program should be consistent. Section 106 would codify the NSPS definition of modification and apply the NSPS definition of modification in 40 C.F.R. 60.14(h) to all industrial sources. Finally, section 106 codifies the EPA's previously issued Equipment Replacement Provision rule.

1. Codification of the NSPS Definition of Modification As defined in the Clean Air Act, a modification is "any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which increases the amount of any air pollutant not previously emitted" (Section 111(a)(4)). In promulgating regulations for the prevention of significant deterioration (PSD) and nonattainment NSR programs, EPA defined "significant" increases in emissions in terms of tons per year emitted by a major source. Under the NSPS definition, however, NSR is triggered only in the extremely rare<sup>1</sup> event that a modification results in an increase in the capacity, or maximum achievable hourly rate of emissions, of an emissions unit (40 C.F.R. 60.14(h)). Thus, codification of the NSPS "hourly" test would allow the reconstruction of process units and boilers across the nation without NSR, allowing all sources to make major changes to their operations and operate their equipment longer hours—thereby increasing their emissions thousands of tons per year—without pollution controls or analysis of the impacts on air quality.

By way of contrast, when a facility currently plans a modification of its equipment at a given process unit, it makes a projection of the increased emissions following the change. Normally, sources making modifications increase their hours of operation afterward to benefit from the resulting increased efficiency of the upgraded unit—and correspondingly increase their emissions. Sources planning to increase their emissions potentially more than *de minimis* amounts (for example, 40 tons per year for SO<sub>x</sub> and NO<sub>x</sub>) currently

<sup>&</sup>lt;sup>1</sup> We know of only one modification in the last 15 years that has triggered NSR requirements.

trigger NSR requirements to install pollution control equipment. In enacting NSR provisions, Congress refused to "grandfather" dirty plants indefinitely. Codification of the "hourly" test, however, would have the effect of allowing sources to increase their emissions significantly, as frequently as they desired, and for an indefinite time period.

2. Codification of the Equipment Replacement Rule The Equipment Replacement Rule (ERP) was vacated in its entirety by the D.C. Circuit Court of Appeals on March 17, 2006. The Court's opinion in *State of New York, et al., v. Environmental Protection Agency* was based in part on the fact that the rule allows sources to significantly increase their emissions without triggering NSR requirements. Specifically, the Court stated, "...Congress defined "modification" in terms of emission increases, but the ERP would allow equipment replacements resulting in non-*de minimis* emission increases to avoid NSR." In fact, equipment replacements valued at 20 per cent or less than the value of the total process unit were exempted by the ERP from NSR under the "routine maintenance" exception—even though actual emissions would increase beyond *de minimis* levels.

In order to understand how emissions could increase significantly if the now-illegal ERP were enacted into law by Congress, it is crucial to distinguish between allowable and actual levels of emissions: The allowable, or permitted levels of emissions for major sources are generally expressed in a permit in terms of the operating capacity of a unit based on 24 hours per day, 7 days per week operation. The fact that the ERP requires facilities to remain under their permitted levels of emissions has little significance because sources can vastly increase their actual emissions without approaching their permitted, allowable levels. Thus, the ERP provides no protection from increases in actual emissions.

Modifications made by the Ohio Edison utility provide an example. The enforcement case brought against the company's coal-burning power plants resulted in the utility being held liable for making 11 modifications of process equipment without complying with NSR requirements. Ohio Edison subsequently entered into a settlement with EPA that will result in reductions of 212,500 tons per year of harmful emissions. However, all except one of the 11 projects would have been exempt from NSR requirements under the 20 per cent cost level of the ERP. Thus, the significant increases in actual emissions caused by the utility's modifications would have been completely legal under the ERP.

<u>Question 2</u>: Please explain whether, under the current New Source Review clean air permitting program, sources can modify their facilities without going through the major New Source Review permitting process.

Response: Under the current NSR permitting program, sources making modifications that result in increased emissions beyond *de minimis* levels must apply for NSR permits, install pollution control equipment (either best available control technology in PSD areas, or lowest achievable control technology in nonattainment areas), and, in attainment areas, must analyze the air quality impacts of their projects in order not to violate the clean air increments. One exception to the NSR requirement exists for facilities whose changes are considered "routine maintenance," which has been evaluated historically by assessing four factors: the nature and extent of the change; the purpose of the change; its cost (i.e., whether it involves capital expenditures); and the frequency of the change. However, facilities making modifications that are located in states within the Fourth Circuit Court of Appeals are not currently subject to NSR unless their hourly rate of emissions increases after the change—which would be an extremely unusual occurrence. The question of which test was intended by Congress to measure increases in emissions

resulting from a modification—annual actual or hourly—is now before the United States Supreme Court in the *Duke Energy* case.

<u>Question 3</u>: The Energy Policy Act of 2005 included a number of provisions addressing potential issues related to boutique fuels.

a. Do you believe that this Congress needs to pass additional legislation further limiting the number of boutique fuels adopted by states to address air quality issues. If yes, please explain what legislative changes you support and why. If no, please explain why.

Response: STAPPA and ALAPCO oppose additional legislation further limiting the number of boutique fuels adopted by states to address air quality issues. We are concerned by assertions that there has been a "proliferation" of state clean air fuel programs and that these programs are responsible for fuel price increases and could potentially compound fuel supply disruptions should they occur. State clean air fuel programs have been wrongly targeted as the cause, and further curtailment of state and local authorities to pursue such programs – beyond the limitations already placed by the Clean Air Act and the Energy Policy Act of 2005 (EPAct) – could unnecessarily jeopardize public health and clean air.

If Congress is interested in taking legislative action with respect to state clean air fuel programs, rather than limit the number of fuels, it should expand states' authorities by allowing increased flexibility to adopt clean air fuel programs that will meet public health needs in the future. STAPPA and ALAPCO recommend that Congress consider 1) expanding the list of clean air fuels available under EPAct to include California Clean Burning Gasoline, 2) allowing all areas of the country – attainment and nonattainment – to opt into the federal Reformulated Gasoline program and 3) facilitating the ability of states and localities to adopt cleaner regional fuels, including allowing attainment areas to participate in such regional programs.

b. If this Congress decides to enact legislation imposing further limitations on State fuel programs, do you believe that such legislation should address only State fuel programs adopted for air quality reasons? Or should it also address State fuel programs adopted for local economic or other reasons. Please explain why.

**Response**: STAPPA and ALAPCO oppose any legislation that would impose any further limitations on state and local authorities to control air pollution, including state clean air fuel programs; we also oppose limitations on fuel programs adopted for local economic or other reasons. If, however, Congress is intent on responding to generic fuel supply and distribution concerns by enacting legislation to impose further restrictions on state and local fuel programs, we do not believe there is any justification for limiting such action only to state clean air fuel programs and not also to other specialty fuel programs.

# RESPONSE FOR THE RECORD BY RED CAVANEY, PRESIDENT, AMERICAN PETROLEUM INSTITUTE



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June 16, 2006

The Honorable John D. Dingell U.S. House of Representatives Washington, DC 20515-2215

Dear Mr. Dingell:

I appreciated the opportunity to testify before the May 11, 2006 House Energy and Commerce Committee hearing entitled "Gasoline: Supply, Price, and Specifications".

Attached are my responses to your additional questions. As always, please don't hesitate to contact me if you have any questions or if you are in need of additional information.

Sincerely,

Attachment

cc: Chairman Barton

#### Attachment

Red Cavaney, API Response to Congressman Dingell

- The Energy Policy Act of 2005 included a number of provisions addressing potential issues related to boutique fuels.
  - a) Do you believe that this Congress needs to pass additional legislation further limiting the number of boutique fuels adopted by States to address air quality issues? If yes, please explain what legislative changes you support and why? If no, please explain why?

### Response

The Energy Policy Act of 2005 (EPACT05) included a provision setting some restrictions on EPA for approval of states' fuels intended for reducing air pollution. In addition, Congress required that EPA and the DOE complete two studies regarding boutique fuels (one this year and one in 2008). We look forward to the results of this study and its recommendation regarding how the number of boutique fuels may be reduced while balancing environmental needs and supply capability. In particular, we need such a careful study to weigh the impact of increased fuel fungibility from a reduced number of fuels with the reduction in production capability that will occur if the overall fuel specifications are made more stringent in the process of insuring continued environmental performance.

b) If this Congress decides to enact legislation imposing further limitations on State fuels programs, do you believe that such legislation should address only State fuel programs adopted for local economic or other reasons? Please explain why?

## Response

The bigger challenge now facing us is the recent proliferation of bio-fuel boutiques that are just as disruptive to supply but lack a basis in improving air quality. We feel strongly that the addition of provisions restricting state bio-fuel mandates would substantially strengthen what has been proposed. More state bio-fuel mandates could undo or offset much of the benefit your legislation as well as EPACT05 promises to provide.

Also, the legislation should be strengthened to further limit diesel boutiques (except for the existing Texas program) by preempting all state diesel programs, including those that address non-road fuels.

At a minimum, we strongly recommend that this legislation amend EPACT05 to require study of the supply and distribution impacts of state bio-fuels mandates. Also, EPA should be required to review potential supply impacts of any fuel under consideration for approval. Simply reducing the number of fuels is not sufficient especially if it means moving to more stringent formulations that reduce producibility which, in turn, could also have adverse supply impacts.

2. Please describe the potential impacts, if any, of State ethanol or biodiesel mandates on the potential to affect gasoline supply, fungibility, and price spikes. Please describe the ways in which these potential impacts are similar to, and different from, the potential impacts of State fuel programs adopted for air quality reasons.

### Response

The federal Renewable Fuel Standard will ensure continued growth in renewables, especially ethanol. Unlike potential state mandates, the RFS builds in flexibility. Its

credit banking and trading component, when established through regulations by EPA, should allow refiners to use renewables where they are most efficient. This is critical for the reliable supply of fuels.

State mandates undermine that flexibility and create obstacles to the achievement of Congress' goals. Individual states should not be permitted to force the use of ethanol or biodiesel by devising and mandating their own gasoline/ethanol and/or diesel/biodiesel blends. The last thing our nation needs now is an expansion of the boutique fuels patchwork of state-by-state laws mandating ethanol and/or biodiesel use at different concentrations and/or under different terms.

Here are examples of the kind of problems that state bio-fuels mandates could create:

- A per gallon mandate requires that E10 be available at all times. Thus, a shortage of ethanol for any reason means that gasoline could not be sold.
- If the governor has chosen to eliminate the 1 pound waiver or if the state has a low rvp fuel requirement, refiners may need to produce a low RVP blendstock (BOB) for conventional gasoline.
- For areas requiring RFG, refiners would be required to produce a lower RVP blend of RFG, i.e. a reformulated BOB, for blending with ethanol. While most are choosing to do this now, it is possible that in the future some will choose to produce RFG with no oxygenates. This would not be possible in a mandate state.

Integrating ethanol and other biofuels into the gasoline marketplace is too important – and presents too many challenges – to be approached in an individual, state-by-state manner. In order to meet consumer fuel needs, we want to produce more, refine more, and distribute more – but state bio-fuel mandates would make this difficult. For example, ethanol cannot be moved by common carrier pipeline, unlike more than 70 percent of U.S. fuel production, and requires a long supply chain to serve consumers. That means a longer reaction time when problems occur. State ethanol mandates would significantly add to that reaction time.

3. In section 1541 of the Energy Policy Act of 2005, Congress gave the EPA authority to issue waivers of state boutique fuel requirements in case of extreme and unusual circumstances. Last fall, EPA used this authority to address extreme and unusual circumstances related to Hurricane Katrina and Rita. Please comment on whether, from your perspective, this authority was helpful in addressing potential hurricane-related supply disruptions.

### Response

The Section 1541 fuels waivers issued by EPA were critically important in enabling industry to respond to the devastation of Hurricane Katrina and Rita. However, because of the extensive nature of the damage done by these hurricanes to U.S. refining capacity, the 20-day limitation in Section 1541 was problematic as it created uncertainty for making supply and distribution decisions. In fact, some waivers had to be reissued three times.

Another problem was when there was a need for not only an EPA waiver but also State waivers of environmental and product quality regulations. What usually occurred was that EPA acted quickly to waive certain federal fuel requirements to increase fuel supplies but the needed state responses were not prompt. This resulted in unnecessary delays in increasing fuel supplies. To remedy this, during events of national significance or extreme supply emergencies, EPA should have authority to waive both federal and state environmental and product quality (situations where state adopts its own product

quality regulations and situations where states adopt ASTM specifications) fuel requirements.

# RESPONSE FOR THE RECORD BY BOB SLAUGHTER, PRESIDENT, NATIONAL PETROCHEMICAL & REFINERS ASSOCIATION

June 16, 2006

The Honorable Joe Barton Chairman Committee on Energy & Commerce U.S. House of Representatives Washington, DC 20515

### Dear Chairman Barton:

Thank you for the opportunity to appear before the Committee on Energy and Commerce at the May 11, 2006 hearing entitled, "Gasoline: Supply, Price, and Specifications." I appreciate the continuing interest that you and your colleagues give to the nation's transportation fuel supplies. As you know, NPRA, the National Petrochemical & Refiners Association, members includes more than 450 companies, including virtually all U.S. refiners and petrochemical manufacturers.

NPRA has prepared responses to questions for inclusion in the official hearing record. Please find NPRA's responses attached to this letter.

Again, I thank you for your interest in the critical issue of supplying the nation with the refined products that it needs. NPRA appreciates your close and cautious consideration of issues affecting the refining industry.

Sincerely,

Boo Staughter

Brb Slaughter

Attached: Responses to Ranking Member John Dingell's Questions for the Record

# Responses to Ranking Member John Dingell's Questions for the Record

- 1. The Energy Policy Act of 2005 included a number of provisions addressing potential issues related to boutique fuels.
  - a. Do you believe that this Congress needs to pass additional legislation further limiting the number of boutique fuels adopted by States to address air quality issues? If yes, please explain what legislative changes you support and why. If no, please explain why.

NPRA believes that the Committee draft is a reasonable and modest approach to the boutique fuels issue, representing the absolute limit that policymakers should consider this year. We do suggest that it would be wise to add four additional items: 1) to include in the definition of boutique fuels all state ethanol and biodiesel mandates, as well as CARB fuel; 2) to require EPA to make a finding on the impact of state biodiesel mandates and CARB fuel on fuel supply fungibility and air quality; 3) to require a study of the impact of a 1-3 fuel national fuel slate on concentration and competition in the U.S. refining industry; and 4) to determine the impact of this bill on the average consumer costs for gasoline, compared to the current system.

b. If this Congress decides to enact legislation imposing further limitations on State fuel programs, do you believe that such legislation should address only State fuel programs adopted for air quality reasons? Or should it address State fuel programs adopted for local economic or other reasons? Please explain why.

### See recommended additional items 1 and 2 above.

Please describe the potential impacts, if any, of State ethanol or biodiesel
mandates on the potential to affect gasoline supply, fungibility, and price
spikes. Please describe the ways in which these potential impacts are similar
to, and different from, the potential impacts of State fuel programs adopted for
air quality reasons.

The Committee draft attempts to control the total number of boutique fuels as defined in section 211(c)(4)(C) of the Clean Air Act in an effort to minimize fuel marketplace volatility and maintain air quality gains. However, while the draft legislation focuses on the purely legal definition of boutique fuels, it expressly allows the proliferation of state mandated fuels using renewable additives such as ethanol and biodiesel.

The federal preemption provisions in the Clean Air Act preserve a rational motor fuel supply because states are precluded from unilateral adoption of unique specifications unless EPA grants a waiver. EPA explains the merits of federal preemption in the preamble for the federal RFG and anti-dumping final rules, which includes the following statements:

"The regulations proposed here will affect virtually all of the gasoline in the United States. As opposed to commodities that are produced and sold in the same area of the country, gasoline produced in one area is often distributed to other areas. The national scope of gasoline production and distribution suggests that federal rules

should preempt State action to avoid an inefficient patchwork of potentially conflicting regulations."

Because the draft legislation intends to improve fuel fungibility and alleviate adverse air quality impacts, it should also cover other fuels, such as state ethanol and biodiesel mandates—whether or not these fuels fall under the requirements of section 211(c)(4)(C) of the Clean Air Act. At the very least this legislation should require EPA to make findings regarding the impact of these mandated fuels upon fuel supply and fungibility and air quality.

3. In Section 1541 of the Energy Policy Act, Congress gave the Environmental Protection Agency (EPA) the authority to issue waivers of State boutique fuel requirements in case of extreme and unusual fuel and fuel additive supply circumstances. Last fall, EPA used this authority to address extreme and unusual circumstances related to Hurricanes Katrina and Rita. Please comment on whether, from your perspective, this authority was helpful in addressing potential hurricane-related supply disruptions.

NPRA commends the federal government for acting quickly and decisively in the face of supply outages. Several steps taken in the days and weeks following these storms helped refiners provide consumers with the products they need. EPA provided temporary fuel waivers that made it easier to supply fuels to affected areas. The waivers pertained to both gasoline and diesel specifications. NPRA appreciates the efforts of EPA and commends the agency for its diligence in gathering the necessary information to protect both fuel supply and environmental concerns.

RESPONSE FOR THE RECORD BY PAUL D. REID, PRESIDENT, REID PETROLEUM
CORPORATION, ON BEHALF OF NATIONAL ASSOCIATION OF CONVENIENCE STORES AND
SOCIETY OF INDEPENDENT GASOLINE MARKETERS OF AMERICA

# NATIONAL ASSOCIATION OF CONVENIENCE STORES 1600 Duke Street Alexandria, VA 22314

# SOCIETY OF INDEPENDENT GASOLINE MARKETERS OF AMERICA 11495 Sunset Hills Road Reston, VA 22090

June 16, 2006

The Honorable Joe Barton Chairman Committee on Energy and Commerce U.S. House of Representatives Washington, D.C. 20515

Re: Responses to Written Questions Submitted in Connection with the May 11, 2006 Committee Hearing on "Gasoline: Supply, Price, and Specifications"

Dear Mr. Chairman:

This letter responds to your letter of May 26, 2006 posing written questions to me that were submitted by members of the Committee in connection with the May 11, 2006 Committee hearing on "Gasoline: Supply, Price, and Specifications." My answers to these questions, on behalf of the National Association of Convenience Stores ("NACS") and the Society of Independent Gasoline Marketers of America ("SIGMA"), are attached.

NACS and SIGMA are pleased to submit these answers to the Committee. If the Committee has additional questions, please do not hesitate to contact us.

Sincerely yours,

Signed
Paul D. Reid
President
Reid Petroleum Corporation
On behalf of
NACS and SIGMA

Attachment

cc: The Honorable John D. Dingell

# Responses to Questions from the Honorable John D Dingell

Question 1. The Energy Policy Act of 2005 included a number of provisions addressing potential issues related to boutique fuels.

(a) Do you believe that this Congress needs to pass additional legislation further limiting the number of boutique fuels adopted by States to address air quality issues? If yes, please explain the legislative changes you support and why. If no, please explain why.

Ms. Sonja Hubbard, Chief Executive Officer of E-Z Mart Stores, Inc., provided the following testimony to the Committee at its June 7, 2006 hearing on boutique fuels. This testimony speaks to this question directly:

"NACS and SIGMA have for many years warned Congress about the fragmentation of the fuels markets which has resulted from various jurisdictions requiring their own boutique fuel blends. Nevertheless, it is our straightforward message to this Committee today that we are more concerned than reassured by the prospect of new fuels legislation this year. Our industry, and the entire motor fuels manufacturing and distribution industries, are still working very hard to implement the significant changes in the motor fuels markets that have been the result of the legislative mandates contained in the Energy Policy Act of 2006 (EPAct). Over the next six months, we also face significant challenges with the introduction of ultra low sulfur diesel fuel (ULSD). . . .

We welcome the Committee's focus on the continued proliferation of boutique fuels and believe that there should be a healthy debate on any additional measures that may need to be undertaken to build on the boutique fuels restrictions in EPAct. . . .

However, we urge the Committee to be very careful when considering additional legislation on boutique fuels in light of the impact such legislation could have on an already volatile gasoline and diesel fuel market."

Ms. Hubbard's testimony continues by recommending that, if the Committee does consider new boutique fuels legislation in 2006, it adhere to the following limitations: (1) avoid the adoption of a fuel slate until the joint Environmental Protection Agency and Department of Energy ("DOE") report on the effects of such a slate is received by Congress in August 2006; (2) adopt a mechanism to gradually reduce the number of boutique fuels (a so-called "ratchet"); and, (3) condition the implementation of state alternative fuel mandates on findings by DOE and the Department of Transportation that sufficient alternative fuel supplies and infrastructure exist to support such a state mandate.

(b) If this Congress decides to enact legislation imposing further limitations on State fuel programs, do you believe that such legislation should address only State fuel programs adopted for air quality reasons? Or should it also address State fuel programs adopted for local economic or other reasons? Please explain why.

As noted in the answer to Question 1(a) above, NACS and SIGMA support congressional action on state alternative fuel mandates. Drawing again from Ms. Hubbard's June 7th testimony before the Committee:

"If state biofuels mandates continue to proliferate, the current situation will only grow worse. Our industry will be required to move ethanol from one market to another, based not on market forces but rather on artificial demand created through state mandates. Even worse, our industry will be prohibited from supplying markets in need, like those reformulated gasoline markets transitioning away from MTBE, because supplies will be held hostage by individual states. Clearly, these state mandates interfere with the efficient flow of interstate commerce of a very important commodity. We urge you to stand by the national renewable fuel standard adopted in EPAct and condition the implementation of any state mandate upon findings by the relevant federal authorities that adequate supplies and logistics exist to support the demands created by these state mandates."

Question #2. Please describe the potential impacts, if any, of State ethanol or biodiesel mandates on the potential to affect gasoline supply, fungibility, and price spikes. Please describe the ways in which these potential impacts are similar to, and different from, the potential impacts of State fuel programs for air quality reasons.

NACS' and SIGMA's answer to Question 1(b) responds to the first part of this question. With respect to the second part of the question, we posit that state alternative fuel mandates have much the same effect on supply, volatility and price spikes as state boutique fuels adopted for air quality purposes. Either boutique fuel -- an alternative boutique fuel or a boutique fuel adopted for air quality purposes -- creates an island of unique fuel specifications that is both difficult to resupply in the event of supply shortages and acts as an artificial and arbitrary barrier to the smooth movement of fuels and fuel additives based on market forces. State biofuels mandates have the added potential effect of inhibiting the smooth implementation of the Renewable Fuel Standard established by the Energy Policy Act of 2005. That program envisioned a flexible system that would enable the petroleum industry to comply with the requirements in the most efficient manner possible. State biofuel mandates eliminate that flexibility.

It also is important to note that this week ethanol is selling at world record levels in spot trading -- over \$5.00 per gallon, or over \$200 per barrel. Because ethanol is a commodity, these prices reflect the same pressures on the domestic ethanol market that high prices reflect on other commodities markets -- namely, high demand and questionable supply. In the context of an examination of state ethanol mandates, these historically high prices reflect both the questionable public policy of such mandates and the constraints that such mandates place on the movement of ethanol from one market to another based on actual demand, rather than artificial governmental mandates. Ethanol currently being used to meet state ethanol mandates could have a moderating effect on these ethanol prices if it is allowed to move to alternative markets.

Question #3. In Section 1541 of the Energy Policy Act, Congress gave the Environmental Protection Agency (EPA) authority to issue waivers of State boutique fuel requirements in case of extreme and unusual fuel and fuel additive supply circumstances. Last fall, EPA used this authority to address extreme and unusual circumstances related to Hurricanes Katrina and Rita. Please comment on whether, from your perspective, this authority was helpful in addressing potential hurricane-related supply disruptions.

NACS and SIGMA believe that EPA exercised the emergency fuel waiver authority grant by Congress in EPAct wisely and judiciously in the wake of Katrina and Rita. The temporary waivers granted by EPA were credited by NACS and SIGMA members -- and by many others -- with increasing motor fuel supplies across the nation and moderating the wholesale and retail price volatility that followed the hurricanes.

NACS and SIGMA generally do not support a substantially wider grant of waiver authority to EPA. However, we have urged Congress to consider two narrow expansions of EPA authority under the EPAct emergency waiver provisions: (1) the adoption of a "hold harmless" provision so that states will not hesitate to follow an EPA emergency waiver out of concern that the state will be forced to offset any increased emissions during the waiver period; and, (2) consider a grant of authority to EPA to issue an emergency waiver if transitions from one fuel to another are significantly constrained by infrastructure or transportation limitations. We would not oppose a proposal to grant the President authority to pre-empt state boutique fuel mandates in the context of a supply emergency to assure that a national determination of an emergency is not undercut by a state's failure to act quickly to suspend temporarily local fuel specifications.

RESPONSE FOR THE RECORD BY BOB DINNEEN, PRESIDENT AND CEO, RENEWABLE FUELS ASSOCIATION



June 16, 2006

The Honorable John D. Dingell House of Representatives Committee on Energy & Commerce Washington, DC 20515

Re: Additional Questions to Witnesses. Hearing on May 11, 2006, entitled "Gasoline: Supply, Price, and Specifications,"

Dear Congressman Dingell:

Attached are responses to the additional questions you submitted from the above-referenced hearing.

- 1. You testified that 35 ethanol plants are currently under construction.
  - (a) How many of these facilities have obtained a major New Source Review air permit?
    - Response: I am not specifically aware how many of the plants under construction have obtained a New Source Review air permit.
  - (b) For those facilities that do not have a major New Source Review air permit, please explain why such a permit was not required.
    - Response: A New Source Review permit would not be required if a plant meets the definition of a synthetic minor, i.e., emits less than 100 tons per year. Generally, plants larger than 50 million gallons must be permitted under New Source Review. Of the plants under construction today, 24 plants are 50 million gallons or less.
  - (c) For those facilities that do have major New Source Review air permits, how long, on average, did it take to obtain the permit once the permitting agency had a complete permit application?
    - Response: In general, plants having to obtain a New Source Review air permit can expect 12-18 months to finalize the process. There have been cases where it has taken longer.
- 2. The Energy Policy Act of 2005 included a number of provisions addressing potential issues related to boutique fuels.

(a) Do you believe that this Congress needs to pass additional legislation further limiting the number of boutique fuels adopted by States to address air quality issues? If yes, please explain what legislative changes you support and why. In no, please explain why.

Response: If the Energy and Commerce Committee concludes "boutique fuels" are a contributing factor to rising consumer gasoline prices, then the RFA would support legislation to reduce the number of fuels refiners must produce and improve overall gasoline fungibility.

(b) If Congress decides to enact legislation imposing further limitations on State fuel programs, do you believe that such legislation should address only State fuel programs adopted for air quality reasons? Or should it address State fuel programs adopted for local economic or other reasons? Please explain why.

Response: States are contemplating biofuels programs to stimulate ethanol and biodiesel production in their respective states. They are attempting to capture the tremendous economic benefits local ethanol and biodiesel production will provide. Consider the local economic impact of just one 100 million gallon ethanol plant:

- Generate \$406 million for the local community;
- Increase the state's Gross Output by \$223 million;
- Increase household income by more than \$50 million; and
- Create nearly 1,600 local jobs.

Congress should not impinge on a state's ability to pursue biofuels programs intended to promote such significant economic development in their states.

3. Please describe the potential impacts, if any, of State ethanol or biodiesel mandates on the potential to affect gasoline supply, fungibility, and price spikes. Please describe the ways in which these potential impacts are similar to and different from the potential impacts of State fuel programs adopted for air quality reasons.

Response: State Biofuels Programs will not affect gasoline supply, fungibility or price. Simply adding ethanol to gasoline does not constitute a "boutique fuel." Indeed, ethanol is blended in 40% of the nation's fuel. Ethanol is either blended with a fully fungible RBOB (reformulated gasoline blendstock for oxygenate blending) in federal RFG areas to meet appropriate emissions standards or with a fungible conventional gasoline, which adds volume and octane to the motor fuel supply. Blending ethanol with conventional gasoline requires no unique blend from refiners and does not add to the complexity of the fuel distribution system. That is fundamentally different from a State fuel program adopted for air quality reasons that requires significant refinery modifications and a separate and distinct fuel distribution and storage infrastructure.

Congressman, I appreciate your interest in renewable fuels, specifically ethanol, and look forward to the ongoing development of ethanol biorefineries in Michigan. Already, Michigan Ethanol, LLC in Caro, MI is producing more than 50 million gallons of ethanol in your state. However, since Congress passed the Energy Policy Act of 2005, Michigan has begun construction on three additional ethanol refineries. In my view, Michigan's ethanol industry is a remarkable reflection of the ongoing domestic biofuels energy infrastructure. If you have additional questions or comments please do not hesitate to contact me.

Sincerely,

Bob Dinneen President & CEO

cc: Peter Kielty, Legislative Clerk, Committee on Energy and Commerce



June 16, 2006

The Honorable Ed Whitfield Member of Congress House of Representatives Committee on Energy & Commerce Washington, DC 20515

Re: Additional Questions to Witnesses. Hearing on May 11, 2006, entitled "Gasoline: Supply, Price, and Specifications,"

Dear Congressman Whitfield:

Attached are responses to the additional questions you submitted from the above-referenced hearing.

1. The biofuels industry has received immense support from the agriculture industry and from my colleagues in the House and Senate. There are a number of new technologies and advancements in the biofuels industry taking place across the country. I believe it is in the interest of the American consumer to support the development of these alternative fuels. Do you support a more expedited approach to marketplace introduction of new, alternative biofuels? Why, why not?

Response: Absolutely, the Renewable Fuels Standard (RFS) as contained in the Energy Policy Act of 2005 is not limited to ethanol and biodiesel and was intended to expand the national usage of renewable fuels. Additionally, although not in production today, new sources of feedstock for ethanol are being created. In a few short years, I believe cellulosic ethanol production will dramatically expand the types and amount of available feedstocks used to make ethanol, including materials now regarded as wastes, corn stalks, rice straw, wood chips and "energy crops" such as fast-growing trees and grasses. Cellulose ethanol production will create new jobs and economic growth outside the traditional "grain belt" from locally available resources, and provide significant greenhouse gas emissions reductions.

2. If new technologies are able to produce a renewable fuel from agriculturally-based feed stocks, albeit with different physical characteristics from conventional biofuels, but remain acceptable substitutes for petroleum based products, they should be treated equally. Unfortunately, they are all too often faced with enormous barriers to entry into the marketplace. The exact situation is happening in my District with a biodiesel producer. A farmer is using a new technology which produces a new horsepower, is more efficient, and cost less to produce. However, because of a turf battle between new and old technologies and the adoption of an international standard, production in my district has been shut down and forced to convert back to old technologies. My constituent has one of the best technologies around and prior to the explosion of this issue, he did not receive one complaint. However, because of inconsistencies in the biodiesel industry he was forced to revert back to a more

expensive and less efficient product. Do you believe additional regulations slow the influx of new alternatives into the marketplace? (i.e. ASTM International Standards).

Response: Any new fuels, even derivatives from current biofuels, must be approved by the Environmental Protection Agency (EPA), due to environmental and health regulations. Additionally, ASTM is the national standard setting body for fuels and biofuels. The ASTM process is a science-based entity that develops standards through consensus of all stakeholders, including engine manufacturers, fuel producers and consumers. ASTM evaluates current and new standards for fuels on an ongoing basis and standards can be changed with sound technical support.

The regulatory and specification process is necessary for creating new fuels in today's marketplace. It ensures transportation fuels products used by consumers are rigorously tested and approved. The ethanol industry has worked with ASTM throughout its history, and standards have changed many times. The process assures the highest quality fuels are being introduced to the marketplace, which is absolutely essential to the long-term viability of the alternative fuels industry.

I am unfamiliar with the specific circumstance facing the company in your district, and have no expertise on biodiesel ASTM standards generally. But from the ethanol industry's experience, I can absolutely affirm the efficacy of ASTM's standard setting process. It has not been a barrier to entry for ethanol companies.

3. Similar technologies are popping up all over the country. I was reading not long ago of a company that is producing a renewable fuel from stale beer. Some critics argue that international standards ensure quality. I understand the need for quality assurances in the marketplace. But it is the marketplace that should make the ultimate determination of the product so long as the environmental protection agency determines the product's viability. Do you support all technologies that provide a variety of choices among alternative biofuels in the marketplace?

Response: Today ethanol is produced from corn, grain sorghum, wheat, barley, sugar cane, cheese whey, beverage waste, including stale beer and unused or wasted soda, sugar beets, the cassava root, potatoes and wheat straw. Each of these feedstocks yield a fuel that meets ASTM specifications. Fuel marketers will simply not purchase product that does not meet ASTM specifications.

Congressman, I appreciate your interest in renewable fuels, specifically ethanol, and look forward to the ongoing development of ethanol biorefineries in Kentucky. Already, Commonwealth Agri-Energy, LLC in Hopkington, and Parallel Products in Louisville are producing nearly 40 million gallons of ethanol in your state. If you have additional questions or comments please do not hesitate to contact me.

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Sincerely,

Bob Dinneen President & CEO cc: Peter Kielty, Legislative Clerk, Committee on Energy and Commerce

